ATTACHMENT J.1.1

STATEMENT OF WORK

TELEPHONE PORTION OF THE NATIONAL MARINE RECREATIONAL FISHERY SURVEY

Table of Contents

1.	Back	Background				
2.	2.1. 2.2.	ry of the Marine Recreational Fishery Statistics Survey (MRFSS)	. 6			
	2.3.	Economic Add-Ons	9			
		2.3.2. CHBTS Add-Ons				
	2.4.	Conduct of the MRFSS Surveys				
	2.5.	Statement of Work and Procedures Manual	11			
3.	MRFSS Definitions					
	3.1.	Coastal Counties				
	3.2.	Fishing Modes				
	3.3.	Fishing Trip				
	3.4.	Marine Recreational Fishing				
		3.4.1. Marine Fishing Areas				
		3.4.2. Recreational fishing				
		3.4.3. Geographic scope				
		3.4.4. Finfish vs shellfish				
	3.5.	Regions and Subregions				
	3.6.	Wave				
	3.7.	Week	16			
4.	Gene	General Requirements				
	4.1.	Survey Scope				
		4.1.1. RDD Telephone Survey	18			
		4.1.2. RDD Economic Add-On	18			
		4.1.3. CHBTS				
		4.1.4. CHBTS Economic Add-Ons				
	4.2.	Sample Sizes				
		4.2.1. RDD Telephone Survey				
		4.2.2. RDD Economic Add-On	22			
		4.2.3. CHBTS				
		4.2.4. CHBTS Economic add-ons				
	4.3.	State and Interstate Fisheries Commission Add-Ons	26			
	4.4.	Privacy Act Statement				
	4.5.	Computer Assisted Telephone Interviewing	27			
5.	Survey Sample Frames and Dialing Requirements					
		RDD				

		5.1.1. RDD Sample Frame and Random Digit Dialing Method	30 30		
		5.1.5. RDD Sampling Tolerances			
	5.2.	CHBTS			
		5.2.1. CHBTS Directory and Sample Frame			
		5.2.2. CHBTS Sample Draw			
		5.2.3. CHBTS Vessel Contact Notification			
		5.2.4. CHBTS Dialing Period			
		5.2.5. CHBTS Number of Attempts			
		5.2.6. CHBTS Sampling Tolerances	35		
	5.3.	CHBTS Economic Add-On			
		5.3.1. CHBTS Economic Add-On Sample Draw	35		
		5.3.2. CHBTS Economic Add-on Vessel Contact Notification			
		5.3.3. CHBTS Economic Add-on Trip Selection			
		5.3.4. CHBTS Economic Dialing Periods	37		
		5.3.5. CHBTS Economic Number of Attempts			
		5.3.6. CHBTS Economic Sampling Tolerances	38		
6.	Survey Questionnaires				
	6.1.	General Instructions			
	6.2.	RDD Questionnaire			
		6.2.1. RDD Screening Introduction			
		6.2.2. RDD Angler Screening			
		6.2.3. RDD Trip Profiling Instructions			
		6.2.4. Flexible Questions			
		6.2.5. Obtaining Proxy Data	53		
	6.3.	RDD Economic Add-On Instructions			
	6.4.	CHBTS Questionnaire	57		
		6.4.1. CHBTS Screening Introduction	57		
		6.4.2. CHBTS Trip Profiling			
	6.5.	CHBTS Add-On Instructions			
7.	Interviewer and Supervision Requirements 67				
<i>'</i> .	7.1.	Interviewers			
	7.1.	7.1.1. Interviewer Qualifications			
			68		
	7.2.	3	70		
	1	· ·	70		
		<u> </u>	70		
	7.3.		71		
	7.3. 7.4.	Verification of outliers			
	1.→.	v Gilli Cation Of Cations	1 2		

8.	Data Bases, Editing Procedures, and Data Delivery		
	8.1.	Data Entry	72
	8.2.	Record Formats	72
		8.2.1. RDD Telephone Interview Data Bases	73
		8.2.2. RDD Non-Fishing Household Data Bases	74
		8.2.3. CHBTS Directory	74
		8.2.4. CHBTS Interview Data Bases	75
		8.2.5. CHBTS Dialing Results Data Bases	75
	8.3.	Data Edits	75
		8.3.1. RDD Edits	76
		8.3.2. CHBTS Edits	77
	8.4.	Data Delivery	77
9.		y Reporting Requirements	
	9.1.	Wave Reports	
		9.1.1. RDD Wave Report Tables	
		9.1.2. CHBTS Wave Report Tables	
	9.2.	Annual Report and Other Deliverables	85
T 4 D 1 1	-0		
Table :	2. App	roximate Telephone Household Interview Quotas by State and Wave roximate Telephone Household Interview Quotas By State, County and	
			89
Table		1 Atlantic Coastal Cooperative Statistics Program Add-on to the	
	•	none Household Interviews By State and Wave	
		nbers of Charter and Head Boats By State	
		rter and Head Boat Sampling Weeks by Wave, 2002-2004	
		roximate Charter and Head Boat Sample Sizes by State and Wave roximate Charter and Head Boat Sample Sizes by State for the Annual	93
· abio		mic Add-on.	94
Table		wable Trip Days for the RDD Telephone Survey, by year and wave	_

Statement of Work

1. Background

The National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) is required to conduct a survey of marine recreational anglers, gathering information on (1) their participation, fishing effort, and catch in marine recreational fishing, and (2) their demographic and economic characteristics.

Until the 1970s, it was thought that commercial fisheries took the greater part of the total marine fishery catch in the waters of the United States. However most species of fish in estuarine and inshore areas, as well as many in open waters, are harvested jointly by recreational and commercial fishermen. Catches by the marine recreational fishery are a significant portion of the total landings of many marine species. Passage of the Magnuson Fishery Conservation and Management Act (MFCMA, 16 USC 1801) in 1976, mandated collection of data for both the commercial and recreational marine fisheries. Catch and effort data for marine recreational fisheries have been collected through the Marine Recreational Fishery Statistics Survey (MRFSS) since 1979 and socio-economic data have been collected since 1994.

Catch, effort, participation, and socio-economic statistics are fundamental for assessing the influence of fishing on any stock of fish. The quantities taken, the fishing effort, and the seasonal and geographical distribution of the catch and effort are required to develop rational management policies and plans. Social and economic data are used to provide descriptive and behavioral information on marine recreational fishing participants; provide estimates of the value of important recreational fisheries; analyze fisheries management decisions regarding allocation, changes in management strategies or changes in factors that affect catch rates and access to marine recreational species for fishing sites; estimate the contribution of recreational fisheries to regional economies; and estimate the impact of fisheries regulations on regional economies. In addition to the need for data on recreational anglers, fisheries management requires cost-earnings data on the charter boat fleet. Accurate, up-to-date catch, effort and socio-economic statistics collected over the range of a given fishery can be combined with information collected by associated biological studies to provide conservation agencies with the information necessary to manage the fishery for optimum yield. Recreational fisheries data are essential for NMFS, the Regional Fishery Management Councils, the Interstate Fisheries Commissions, State conservation agencies, recreational fishing industries, and others involved in the management and productivity of marine fisheries. The allocation of many fishery resources depends on the results of these surveys.

The National Marine Fisheries Service is charged with administering a program of research and services relating to the ocean and inland waters of the United States. Collecting statistics on marine recreational fisheries is authorized by:

- 1. Section 5(a)(4) of the Fish and Wildlife Act of 1956 (16 USC 742), which provides for collection and dissemination of statistics on commercial and sport fishing;
- 2. Migratory Game Fish Study Act of 1959 (16 USC 760(e)), which provides for a continuing study of migratory marine fishes, including the effects of fishing on the species.
- 3. Sections 303 and 304(e) of the Magnuson Fishery Conservation and Management Act of 1976 (MFCMA), (Public Law 94-265), and the re-authorized and amended Magnuson-Stevens Fishery Conservation and Management Act of 1996 (MFCMA), which require the collection of statistics for fishery conservation and management.
- 4. Sections 802 and 804 of the Atlantic Coastal Fisheries Cooperative Management Act, which requires NMFS to develop and implement a program to support the Atlantic states and the Atlantic State Interstate Commission interstate fishery management efforts, including collection, management and analysis of fisheries data.

2. History of the Marine Recreational Fishery Statistics Survey (MRFSS)

Comprehensive collections of the effort and catch data needed for accurate and precise estimations of recreational fishery catches of marine fishes are difficult and expensive. Recreational anglers are dispersed along the coast, fishing from boats, piers, jetties, docks and the open beach. They fish during the day and night throughout the year. The few coastal states collecting catch statistics have used a variety of methods, but have usually covered only a part of a state or selected segments of a fishery. NMFS conducted Salt Water Angling Surveys (SWAS) in 1960, 1965, and 1970. These surveys were supplements to the Bureau of Sport Fisheries and Wildlife's National Survey of Hunting and Fishing. Prior to 1979 the SWAS were the only surveys that produced marine recreational catch and participation statistics by species for the entire United States.

The data collected in the SWAS were inadequate to satisfy requirements for information on recreational harvests of marine fishes. The SWAS did not sufficiently provide the area-specific catch information needed for effective management of fishery stocks. More importantly, substantial response errors resulted from the use of a one-year recall period. Respondents were unable to accurately remember information requested for all fishing trips taken during the previous twelve months. Data collected every five years were found to be unsuitable for tracking rapid changes in the recreational harvest. Fisheries managers needed more detailed and reliable catch, participation, and economic statistics on marine recreational fishing to provide comprehensive estimates of the domestic

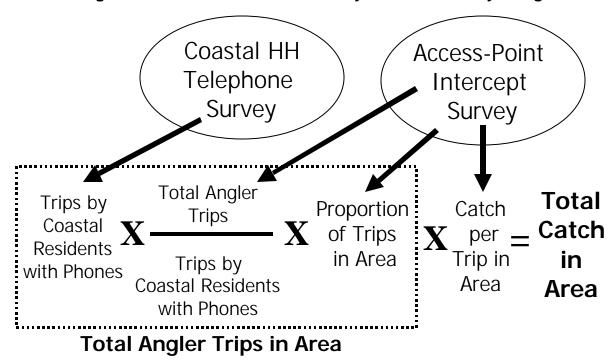
harvest of marine fish species in U.S. waters. They needed such information for evaluating future demands on the fish stocks, for predicting and evaluating the impact of fisheries regulations, and for planning recreational facilities for anglers.

NMFS conducted regional surveys in the Northeastern coastal states in 1974 and the South Atlantic and Gulf of Mexico states in 1975. The data collections used a multi-stage sampling procedure. The regional surveys assumed that the target population of recreational fishing households could be considered as a subset of the households with telephones. NMFS used random-digit-dialing methods to select a sample of residential households with anglers who fished during the previous twelve months. The survey administrators mailed a questionnaire requesting detailed information on a full year of marine fishing activity to random samples of these households stratified by household population density and distance from shore of resident fishing trips. Analyses of the survey results identified numerous procedural weaknesses, such as a low rate of response to the initial screening phase, a twelve-month recall period, and a very low rate of response to the mailed questionnaire (approximately 25 percent).

2.1. Random Digit Dialing Telephone Survey

NMFS later initiated a study of alternative methodologies during the late 1970's and pretested some of the alternatives on the Pacific coast. The study compared several data collection approaches and recommended one as the most cost-effective. The recommended approach was the current survey design, a complemented surveys approach involving the combination of a telephone household survey with an access-site intercept survey. The basic design of the MRFSS is shown as Figure 1.

Figure 1. Marine Recreational Fishery Statistics Survey Design



The current Marine Recreational Fishery Statistics Survey (MRFSS) uses random-digit-dialing (RDD) of households in coastal counties to obtain participation and effort data, as well as information on the proportion of fishing households. Data obtained from the telephone household survey are used to estimate the total number of marine recreational fishing trips taken by residents of coastal areas. This survey is generally limited to households in counties that are located within 25-50 miles of the coastline because the majority of the recreational fishing trips are taken by persons living in households in those counties. The intercept survey is needed in addition to the telephone household survey because certain data cannot be reliably collected over the telephone in a cost-effective manner and to provide adjustment factors for non-coastal trips. These data include: exact species, total number of each species, and length and weight measurements. The intercept survey also collects information on the numbers of anglers with and without phones and the distribution of anglers by state and county of residence. This information is used in the expansion of the estimates of coastal resident effort to obtain estimates of total effort.

Data from the telephone household survey and the intercept survey are combined to provide an estimate of the total catch of marine recreational anglers. Total catch is reported by species both in quantity and weight. The MRFSS also provides an estimate of the number of marine recreational anglers in the United States.

NMFS further tested the complemented survey methodology on the Atlantic and Gulf coasts to ensure that: 1) information used to develop the Pacific coast frame was available for other parts of the country, and, 2) the approach was appropriate in areas with different geographic and demographic characteristics. NMFS completed the Atlantic and Gulf coasts study in December 1978.

Routine marine recreational fishery surveys employing the MRFSS complemented survey approach began in 1979 and have been conducted in the following areas and years:

Atlantic and Gulf coasts 1979-2001

Pacific coast 1979-1989, 1993-2001 Western Pacific area 1979-1981

ern Pacific area 1979-198

Hawaii 2001

U.S. Caribbean

Puerto Rico 1979, 1981, 2000-2001

U.S. Virgin Islands 1979, 1981, 2000

In 1979, the MRFSS was conducted on the Atlantic, Pacific (except Alaska), and Gulf coasts (including Texas), as well as Hawaii and the U.S. Western Pacific territories, and the U.S. Caribbean territories. In 1981, sampling in Hawaii and the U.S. Western Pacific territories, and the U.S. Caribbean territories was discontinued due to insufficient funding. In 1986, sampling in Texas was discontinued in order to stop duplication with a long-term state sampling program after the state of Texas agreed to provide their survey data to NMFS for fisheries management purposes. Also, in 1986, coverage of head boats in the Southeast Region (North Carolina to Texas) was discontinued in order to decrease duplication of effort with the Southeast Region Head boat Survey. Head boats from Maine through Virginia and on the Pacific coast continued to be surveyed as part of the combined charter/head boat mode. From 1990-1992, all sampling on the Pacific coast was also discontinued due to insufficient funds. In 2000, the MRFSS was re-established in the U.S. Caribbean, although there were severe problems with attracting and retaining reliable intercept interviewers in the U.S. Virgin Islands (USVI). Sampling in the USVI was dropped during 2001 to allow development of better ways to field the intercept survey, and intercept and telephone sampling is expected to resume in 2002. Currently the MRFSS staff is working with Hawaii state natural resource staff to re-establish the MRFSS in Hawaii in 2001, which will continue into 2002. Current projections are that sampling in the U.S. Caribbean and Hawaii will continue through 2004.

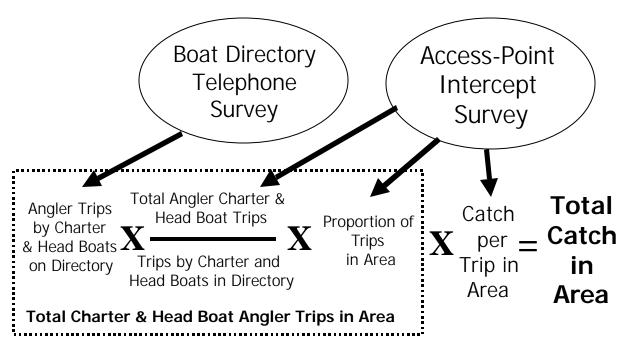
The telephone survey has always been conducted by a contractor; however, on the intercept survey there has been a transition from contracting to cooperative agreements with the Interstate Marine Fisheries Commissions. This process of transition began when the Pacific States Marine Fisheries Commission operated as a contractor during the mid to late 1980's. During the last 6 months of 1992, the PSMFC began conduct of the intercept survey through a cooperative agreement, and that arrangement has continued to the present. In 1997, the MRFSS staff began a cooperative agreement with the Gulf States Marine Fisheries Commission (GSMFC) to conduct research into alternate methods to collect charter boat effort data. Through that cooperative agreement, the GSMFC gained experience conducting the charter boat intercept sampling and in 1999, after a bench-marking process side-by-side with the MRFSS Intercept Contractor, conduct of the complete MRFSS Intercept Survey in east Florida and the Gulf of Mexico was transferred to the cooperative agreement with the GSMFC and its member states. That arrangement has continued to the present. Conduct of the MRFSS Intercept Survey in the U.S. Caribbean is currently through the intercept contract but in 2002 it may be done through a cooperative agreement with the GSMFC. The re-establishment of the MRFSS intercept survey in Hawaii is also expected to be through a cooperative agreement with the Hawaii Board of Land and Natural Resources Department of Aquatic Resources.

2.2. Charter and Head Boat Telephone Survey

In the mid-1990's, the National Marine Fisheries Service (NMFS) began a series of cooperative pilot studies to test alternate methods of surveying fishing effort by the charter and head boat fishery. The traditional MRFSS RDD telephone survey of coastal county households has been very effective for collecting fishing effort information from shore and private/rental boat anglers. However, it is less effective for collecting effort data from party and charter boat anglers for two reasons. First, the large majority of party and charter boat clientele do not reside within coastal counties. Consequently, large adjustments must be made to account for party/charter fishing by non-coastal residents. Second, less than 1% of coastal residential households surveyed actually report party/charter fishing activity. This makes it difficult to obtain adequate sample sizes for precise estimation. Because these problems can cause estimates to vary greatly from year to year, they have been questioned by fishery managers and the party/charter boat fleet.

The NMFS believed that state level for-hire vessel directories could be developed and used as sampling frames to improve the efficiency, precision, and credibility of MRFSS for-hire effort estimates. Initial cooperative investigations with state agencies to study the utility of vessel directories were conducted in Maine from 1995 to the present and in North Carolina in 1996 and 1997. These studies produced promising results, and from 1997-1999 the NMFS funded a cooperative state-federal pilot survey with the Gulf States Marine Fisheries Commission (GSMFC) and its member states to test a vessel directory survey of charter boat angling at the regional level.

Figure 2. Marine Recreational Fishery Statistics and Charter and Head Boat Telephone Survey Design



For the Gulf study, charter boat directories were developed and maintained by participating Gulf state agencies and the GSMFC. From September 1997 through the present, state personnel randomly dialed representatives of a weekly 10% sample of the charter boats for each state. The representatives (usually captains or owners) were asked about: 1) the number of chartered fishing trips in the previous week, 2) the number of paying anglers on each trip, 3) the primary area of fishing for each trip, 4) total hours spent actively fishing, and 5) type of fishing conducted. The Gulf pilot survey also evaluated use of voluntary logbook reporting by a rotating panel of charter boat captains in the panhandle region of Florida. The pilot survey also included an independent validation survey as a means of estimating possible under- or over-reporting of trips by either weekly interviewing or logbooks, due to concerns over the potential inaccuracy of self-reported data.

The weekly telephone survey produced significantly more efficient, precise, and credible charter angler effort estimates than the traditional MRFSS method. This was primarily due to better coverage of charter angling activity, collecting the fishing area data from vessel representatives rather than their customers, and excellent cooperation rates from the charter fleet. In the Gulf study, although there were no significant statistical differences between MRFSS and the weekly telephone survey estimates for annual Gulf-wide and state level effort, the new methodology produced higher charter angler effort in inland waters and lower charter angler effort in the exclusive economic zone (EEZ). This results in higher catch estimates for predominantly near-shore species and lower catch estimates for predominantly offshore species. The pilot study also indicates a significantly different seasonal distribution of charter angler effort, which the Gulf charter fleet considers more realistic. The weekly calling methodology also had better response rates and was more accurate and precise than the rotating panel.

The NMFS adopted the weekly telephone survey methodology as the new MRFSS charter method in the Gulf of Mexico starting in 2000 and hopes to implement it nationwide by 2002. To properly benchmark differences between the two surveys and preserve the historical time series, the NMFS will continue to conduct both the traditional MRFSS and the new survey side-by-side for at least 3 years. Thus the RDD will continue to collect trip data for charter and head boat fishing for the first 3 years of implementation on the Atlantic and Pacific coasts, but will be discontinued for the Gulf coast in 2002 and in East Florida in 2003 (the new survey began in East Florida in 2000 although those estimates are not yet officially adopted).

The CHBTS (charter boats only) is being conducted in East Florida and the Gulf of Mexico through a cooperative agreement with the GSMFC. Implementation on the Pacific coast is currently underway through the PSMFC, although they plan to actually conduct the work through a contract. On the Atlantic coast, the CHBTS will be conducted through this contract. There may be economies of scale obtained through conduct of both the Pacific and Atlantic coasts, therefore pricing for both coasts is being requested in this request for proposals. Conduct of the CHBTS in the U.S. Caribbean may be done either through cooperative agreement or through this contract. Conduct of the CHBTS in Hawaii is expected to be through that cooperative agreement.

It should be noted that during implementation and for some time thereafter, there may be some overlap of the CHBTS with current established monitoring programs of charter and head boats. These other programs will continue to function until either the CHBTS or the alternative program is proven to provide better data, or until regulatory changes can be made to change the requirements for the other programs. In most cases, these other programs do not include the entire universe of charter and party boat vessels in their applicable state or region and thus are unable to provide complete landings and effort

statistics for the for-hire fleet. If alternative programs are chosen for the long-term, it is expected that they would apply only to vessels covered by their jurisdiction and the MRFSS CHBTS would cover all remaining vessels. These other programs include: a) the Northeast (Maine-Virginia) Regional Charter Boat Logbook (NERCBL), b) the Southeast Regional Head boat Survey (SERHS), c) and various state logbook programs such as the New Hampshire Headboat Logbook Survey (NHHLS), the Maryland Ocean-Boat Logbook Survey, and the South Carolina Charter Boat Logbook Survey (SCCBLS).

2.3. Economic Add-Ons

2.3.1. RDD Economic Add-Ons

In the 1990s the NMFS began two rounds of surveys across three regions (Northeast, Southeast, and Pacific Coast) in conjunction with the MRFSS. The first round was for valuation and the second round was for expenditures. The portion of the valuation survey conducted as an add-on to the household telephone survey was designed to collect demographic data. This demographic data is used to profile marine angling participants, and when used in conjunction with census data, to predict marine angling participation rates into the future. The portion of the expenditure survey conducted as an add-on to the telephone household survey collects detailed data on anglers' fishing-related expenditures. This data can be used to weight expenditure data collected during the intercept survey portion of this survey round. This weighted data is then used primarily in input/output analyses.

The valuation surveys were conducted in the Northeast region in 1994, the Southeast region in 1997, and the Pacific coast in 1998. The expenditure surveys were conducted in the Northeast region in 1998, the Southeast region in 1999, and the Pacific coast in 2000.

2.3.2. CHBTS Add-Ons

In 2001 the MRFSS will begin a project to collect cost-and-earnings economic data from the for-hire industry using the CHBTS as a sample frame. The cost-and-earnings information collected from this fleet will be used in support of analyses needed to comply with the National Environmental Policy Act, the Regulatory Flexibility Act, the Magnuson-Stevens Fishery Conservation and Management Act, the Endangered Species Act and other applicable federal law. The data collected will be used for three general purposes. First, the data will be used to predict potential effects of alternative regulatory actions on the for-hire fleet. The need for economic data to conduct regulatory analysis has been heightened by a 1996 amendment to the Regulatory Flexibility Act, which allows agencies to be sued for inadequately considering the effects of regulations on small businesses.

Second, the data will be used to estimate the extent of overcapacity in the for-hire fleet and to help identify reasonable alternative approaches to reducing capacity, should such reduction be deemed necessary. Third, the data – in combination with effort and harvest - will be used to measure and monitor the economic performance of the fishery. Such routine monitoring is important for anticipating fishery management problems before they become severe and difficult to address.

The questionnaires and sampling methods were developed by representatives of the Southwest and Northwest Fisheries Science Centers in consultation with NMFS Headquarters staff (F/ST1), the Pacific States Marine Fisheries Commission (PSMFC), Pacific state agency staff, and industry representatives and groups such as the Sportfishing Association of California. Industry views on the availability of data, the frequency of collection, the clarity of instructions, the amount of burden to be imposed, and ways to minimize the burden were integral to the consultation process. Consultations among the industry, NMFS and PSMFC have been ongoing since late spring 2000.

Industry representatives as well as preliminary data analysis indicate that for-hire fishing activity varies significantly by vessel size, with vessel length overall and number of licensed passengers providing reliable indicators of size. Larger vessels, which typically carry more passengers and travel to more distant fishing grounds (often for multi-day trips), tend to generate higher revenues and costs than smaller vessels. Because of these vessel size-related differences, as well as differences in target species and species availability at different locations along the coast, it was decided that the survey would distinguish between large and small vessels and among areas, with each combination of vessel size and area treated as a separate stratum.

In order to obtain a comprehensive economic profile of the for-hire fleet, the questionnaires cover both fishing and non-fishing (e.g., whale watching) activities of for-hire vessels. The questions were designed to be sufficiently broad in scope to accommodate all the general types of analyses discussed above. To accomplish these goals, it was determined that two surveys would need to be conducted: 1) a one-time survey to collect annual expenses, and 2) a recurring trip survey conducted as an add-on to the normal CHBTS dialing (hereafter referred to as the annual economic survey and the trip-level economic survey). The annual survey will collect data regarding the volume and types of activities engaged in by the for-hire fleet during the year, as well as annual economic revenues, costs and employment. The recurring survey will be conducted as an add-on to the CHBTS that focuses on trip-level information as opposed to annual data. The economic add-on to the MRFSS will be collected weekly over the course of one full year to ensure that the range and seasonality of for-hire activity is captured.

2.4. Conduct of the MRFSS Surveys

The MRFSS RDD Telephone Survey will be conducted in all sub-regions by one contractor from 2002 through 2004. The MRFSS Intercept Survey is expected to be conducted on the Atlantic coast north of Florida by one contractor. Conduct of the MRFSS Intercept Survey in East Florida and the Gulf of Mexico and on the contiguous Pacific coast will be through cooperative agreements with the Gulf and Pacific States Marine Fisheries Commissions, respectively. Conduct of the MRFSS Intercept Survey in the U.S. Caribbean may be through either the contract with the Atlantic coast Intercept contractor or through the cooperative agreements with the GSMFC and those territory's marine fisheries agencies. Conduct of the MRFSS Intercept Survey in the state of Hawaii is expected to be through a cooperative agreement with that State's marine fisheries agency.

2.5. Statement of Work and Procedures Manual

In previous procurement actions, the request for proposals included both a generalized Statement of Work and a more specific Procedures Manual which described very specific requirements. In many cases, the 2 documents overlapped and there was duplicate description of requirements. In other cases, the NMFS MRFSS staff and Contractors had to consult one of the documents, but it was not always apparent which document contained the specific information that was being sought. This statement of work incorporates both the Procedures Manual and the statement of work into one document. This should allow one unified description of all work to be accomplished and allow easier referencing.

Any questions or problems not covered in this statement of work should be directed to the National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Science and Technology, Fisheries Statistics and Economics Division (F/ST1) through the Contract Officer.

3. MRFSS Definitions

3.1. Coastal Counties

The MRFSS RDD Telephone Survey is conducted in coastal counties of coastal states. Coastal counties are (1) those counties which border on marine waters, including areas where marine species of finfish are caught, and (2) those counties any part of which is within a distance from shore specified by NMFS. The specified distances from marine shoreline are intended to include most of the participants in marine recreational private boat and shore fishing. Past MRFSS results indicate that for most states and territories, a distance of 25 to 50 miles from the coast includes the population accounting for 70-80 percent or more of the total private/rental boat and shore fishing trips in the state. Generally counties with any part of their boundary within 25 miles of the coast or shorelines of major bays or estuaries are always considered coastal counties and are included in the telephone household survey. There are several extensions to this definition:

- 1. The boundary is extended to 50 miles in the South Atlantic and Gulf subregions from May through October (Waves 3 through 5).
- 2. For the Pacific Coast, the distance varies due to the large size of the counties, and may extend beyond 25 miles in many areas. Some counties on the Pacific Coast that are outside the 25 mile coastal zone are also included since they represent metropolitan areas that contained anglers known to go saltwater sportfishing.
- 3. Due to special residence and fishing participation patterns, North Carolina coastal counties are within 50 miles of the coast from November through April (Waves 1, 2, and 6) and within 100 miles of the coast from May through October (Waves 3, 4 and 5).

State and county codes for all states and counties are listed in Appendix A. Counties considered to be coastal for waves 1-2 and 6 and for waves 3-5 are listed in Appendix B.

3.2. Fishing Modes

The MRFSS is structured around types or "modes" of fishing. While there are many types of fishing, three major mode groups are considered:

1. Shore mode (SH) includes fishing on man-made shoreline structures such as piers, jetties or bridges, and on natural beaches or banks. Definitions for individual types of shoreline are;

Man-Made Shore

<u>Pier</u>--A structure built out over water and supported by pillars, and without long-term docking facilities for boats;

<u>Dock</u>--A structure built out over water and supported by pillars/anchors, with long-term docking facilities for boats;

<u>Jetty</u>--A kind of wall, usually made of rocks, built out into the water to restrain currents or protect a harbor;

<u>Breakwater</u>--An offshore structure used to protect a harbor or beach from the forces of waves;

<u>Breachway</u>--A shore along a connecting channel;

Bulkhead, Sea Wall--A retaining wall along a waterfront;

Bridge--A structure carrying a pathway or roadway over a body of water;

Causeway--An elevated or raised way across wet ground or water;

Natural Shore

<u>Beach</u>--A level stretch of pebbles or sand beside a body of water, often washed by high water;

<u>Bank</u>--A stretch of rising land at the edge of a body of water not washed by high water, which could be rocks or an overhanging cliff; and

Other - Any other non-boat fishing.

- 2. Head boat mode (HB) includes fishing on boats on which fishing space and privileges are provided for a fee. Head boats are generally large, they may carry from 7 passengers up to 150 paying passengers, and anglers usually pay on a perhead basis for the opportunity to fish on them. The vessel is operated by a licensed captain (guide or skipper) and crew. In some areas of the country head boats are called party boats or open boats. These boats are usually not launched until a specified number of anglers have paid and boarded. Anglers on these full or half day trips usually do not know all of the other anglers on the boat. Head boats usually engage predominantly in bottom fishing. Head boats may make all-day or half-day trips.
- 3. Charter boat mode (CB) includes fishing on boats operating under charter for a specific price, time, etc. Charter boats are smaller in size than head boats, they usually carry fewer than 7 paying passengers, and they are usually hired, or "chartered", by a group of anglers. They are operated by a licensed captain and crew, and the participants are usually part of a pre-formed group. Thus, charters

are usually closed parties, as opposed to the open status of party boats. A subset of charter boats are also called guide boats, which are small boats fishing inland waters with two to three clients. Charter boats can engage in a full range of fishing techniques, including trolling, bottom fishing, and drift fishing. Charter boats may make all-day or half-day trips.

4. Private/rental boat mode (PR) includes fishing on both private boats and rental boats. A private boat belongs to an individual. Private boat trips are any boat trip where no fee is paid for the use of the boat. Individuals may contribute to the cost of the trip (i.e. friends chipping in for gas), but there is no commercial transaction. Rental boats are rented or leased from a commercial enterprise. No captain or crew is provided--the renter operates the boat.

3.3. Fishing Trip

A fishing trip is defined as fishing during part or all of one waking day in one mode. An angler who fished from both a pier and a jetty on the same day made one fishing trip since the pier and jetty are both in the shore mode. However, an angler who fished from a head boat in the morning and a pier in the afternoon is counted as having made two trips--a head boat trip and a shore trip.

Fishing trips should be considered to be waking days, as opposed to calendar days. A trip beginning in the evening but ending past midnight would be considered one trip. Problems arise when an interviewer comes across an angler who has been on a trip, most likely a boat trip, lasting several days. In this instance, each of the angler's waking days would be considered a separate trip. If the angler's waking day was more than 24 hours, then more than one trip should be recorded since a single trip cannot be longer than 24 hours.

3.4. Marine Recreational Fishing

The MRFSS and CHBTS collect data on fishing in marine (or salt) waters by recreational fishermen who are fishing for finfish, not shellfish, and whose trips begin and end anywhere in the United States.

3.4.1. Marine Fishing Areas

Marine or salt waters includes oceans and open water areas, as well as inland salt or brackish water bodies. Inland saltwater bodies include sounds, passes, inlets, bays, estuaries, brackish portions of rivers, and other areas of salt or brackish water like

bayous and canals. Some coastal water bodies are called lakes but should still be considered saltwater, i.e., Lake Pontchartrain, Louisiana; however, high salinity non-coastal lakes like the Salton Sea in Southern California are not valid marine recreational fishing areas. Freshwater trip data are not collected through the MRFSS. NMFS has recently compiled a subset of the coastal counties that actually have saltwater coastline within the county boundaries (Appendix C). This list will be used in the RDD questionnaire to verify that reported trips were from access sites adjacent to saltwater. In past years, the MRFSS had defined saltwater/freshwater boundaries for all Pacific Coast rivers. During 2001, the NMFS is working with Atlantic and Gulf coastal states to establish easily identified landmarks for saltwater/freshwater boundaries. This list of landmarks will be completed before the start of the contract and provided to the contractor to use in conjunction with the area fished question to verify that the trip is saltwater.

3.4.2. Recreational Fishing

Recreational anglers are those individuals whose primary purpose of fishing is for fun or relaxation, as opposed to providing income from the sale of fish. If part or all of the catch was sold, the monetary returns may have constituted an insignificant part of the angler's income; if so, the angler is considered recreational. Commercial trip data are not collected in the MRFSS.

3.4.3. Geographic Scope

The survey includes individuals whose trips end and begin at coastal access sites anywhere in the United States. Fishing trips made out-of-state (i.e. a fisherman from Massachusetts who travels to Florida for vacation and goes fishing while there) are distinguished from trips made in the state or sub-state area where the survey is being conducted (i.e the same Massachusetts fisherman making a fishing trip from an access site on Cape Cod). Boat trips that left and returned from a surveyed state but fished in waters off another state are considered in-state trips. Boat trips that left and returned from a surveyed state but fished in foreign waters (Mexico, Canada, or Caribbean islands) are considered in-state trips. This last situation rarely occurs and only in the northernmost counties of Washington and Maine, the southernmost county in California, and counties in the southeastern portion of Florida.

3.4.4. Finfish vs Shellfish

Only fishing trips directed at fish with fins are eligible for MRFSS interviews. Information on trips made in pursuit of crabs, shrimp, lobster, clams, oysters, mussels, scallops, and other invertebrates are not normally collected.

3.5. Regions and Subregions

The MRFSS is conducted in the following Regions and subregions:

Region I - Pacific Coast

- Subregion 1. **Southern California** [San Diego County through Santa Barbara County].
- Subregion 2. **Northern California** [San Luis Obispo County through Del Norte County].
- Subregion 3. Pacific Northwest [Oregon and Washington].

Region II - Northeast

- Subregion 4. **North Atlantic** [Maine, New Hampshire, Massachusetts, Connecticut and Rhode Island].
- Subregion 5. **Mid-Atlantic** [New York, New Jersey, Delaware, Maryland, and Virginia].

Region III - Southeast

- Subregion 6. South Atlantic [North Carolina, South Carolina, and Georgia,].
- Subregion 7. **Gulf of Mexico** [Florida East coast (Nassau County through Dade County) Florida West coast (Monroe County through Escambia County), Alabama, Mississippi, and Louisiana].
- Subregion 11.**U.S. Caribbean** [Puerto Rico and U.S. Virgin Islands].

Region IV - West Pacific

Subregion 8. Hawaii.

3.6. Wave

The MRFSS is structured around two-month sampling periods called "waves."

January-February = Wave 1
March-April = Wave 2
May-June = Wave 3
July-August = Wave 4
September -October = Wave 5
November-December = Wave 6

3.7. Week

For the CHBTS, sampling within waves is conducted on a weekly basis. A week is defined as Monday through the following Sunday.

4. General Requirements

The 2002-2004 MRFSS Telephone Survey includes four tasks: 1) the Random Digit Dialing Telephone Survey, 2) the RDD Economic Add-on, 3) the Charter and Head Boat Telephone Survey, and 4) the CHBTS Economic Add-on. Sections L and M describe proposal requirements and contents for each of these tasks.

The MRFSS Telephone Survey Contractor shall be responsible for all data collection tasks under this contract, as well as conducting all data entry, data checking, and data editing according to NMFS specifications, including but not limited to:

- 1. hiring, training, deployment and supervision of interviewers;
- 2. survey administration, including selection of specific sampling units to be interviewed:
- 3. collection of specified fishing effort information by surveying households by telephone;
- 4. collection of specified fishing effort information by surveying charter and head boat captains or other named vessel contact by telephone;
- 5. collection of specified economic add-on information from households and charter and head boat captains by telephone;
- 6. CATI entry of telephone interview data;
- 7. making modifications to the CATI programs to accommodate changes to the questionnaire;
- 8. editing of every entered variable for possible coding or key-entry errors identifiable as out-of-range, illogical, or unreasonable and correcting all such errors identified in the data bases to produce error-free (defined in Data Entry and Editing, Section 8.) data bases stored on electronic media;
- 9. use of of data distributions supplied by MRFSS for outlier analyses as appropriate to the RDD, CHBTS, and economic add-on surveys;
- 10. preparation of summary tables for use in checking, editing and reviewing the data at wave review meetings;
- 11. preparation of two-month progress reports (wave reports), as well as an annual final summary report of the data collection procedures and results;
- 12. attendance and participation at three wave review meetings and one conference call review meeting per year;
- 13. participation in bi-weekly conference calls with the NMFS and the intercept contractor:
- 14. making proposals to modify the data collection procedures based on review of survey results; and
- 15. timely delivery of error-free electronic data bases to the NMFS.

The MRFSS Telephone Survey Contractor's responsibility shall include coordination of the telephone surveys with the NMFS and with the entities conducting the MRFSS Intercept Survey.

Reports of the results of the previous surveys are available through our web site at http://www.st.nmfs.gov/st1/procurement/mrfss-survey.html. The user id is demo and the password is ur2sea.

4.1. Survey Scope

4.1.1. RDD Telephone Survey

The MRFSS Telephone Survey specifically excludes Texas and Alaska. The MRFSS random digit dialing telephone household survey shall be conducted in the Northeast, Southeast, and Pacific regions. The MRFSS random digit dialing telephone household survey may be conducted in the U.S. Caribbean and Hawaii subregions. It will collect trip information for all modes, except that for the Gulf of Mexico for 2002 through 2004 and for East Florida for 2003 through 2004, data on charter and head boat trips is not required to be collected. These data may be collected if it is easier to program the CATI system in this way.

The RDD survey is conducted continuously on an annual basis on the Pacific and Gulf coasts, and the Atlantic coast of Florida, and on a 10-month basis (March through December or waves 2-6) on the Atlantic coast north of Florida, except for Maine and New Hampshire. The RDD survey is conducted on a 6-month basis (May through October or waves 3-5) in Maine and New Hampshire. Wave 1 (January and February) data on the Atlantic coast north of Florida and wave 2 (March-April) and wave 6 (November-December) data in Maine and New Hampshire have been collected periodically in the history of the survey and may be included in the 2002 survey. If ordered, the RDD survey will be conducted on an annual basis in the U.S. Caribbean and Hawaii subregions.

Data collected in each state includes the presence of angling households, numbers and profiles of all anglers in each household, and profiles of all marine recreational fishing trips (for the specified modes) in each wave.

4.1.2. RDD Economic Add-On

The MRFSS RDD economic add-on shall be conducted in the Northeast Region during 2002. The economic add-on to the MRFSS Telephone Survey shall be directed at four categories of respondents identified in the MRFSS RDD interviews. The add-on

economic questionnaire calls for interviewing not only 2-month anglers (recreational fishermen who fished in salt water in the last two months) but also anglers with less recent fishing experience and respondents with no fishing experience who are not normally targeted in the MRFSS Telephone Survey. Potential respondents to the add-on survey include: (1) persons who have never gone saltwater sport fishing; (2) persons who have gone saltwater sport fishing but not in the previous 12 months; (3) persons who had saltwater fished in the previous 12 months but not in the previous 2 months; and (4) persons who had saltwater fished in the previous 2 months (2-month anglers).

Household members who fall into categories 1, 2, 3 or 4 and who are at least 16 years are age are eligible to participate in the add-on telephone survey. While proxy information is allowed for category 4 anglers as part of the base MRFSS Telephone Survey, the add-on economic questions shall be asked only of respondents who are actual 2-month anglers and not proxy respondents. (Proxy respondents generally comprise 15%-20% of the total sample of 2-month fishing households.) Proxy reporting is also disallowed for respondents in categories 1, 2, and 3.

The add-on economic questions shall be asked of at least one category 4 respondent in a household with category 4 members and <u>no more than one</u> eligible respondent per household for all of the other categories of respondents. If a household includes one or more members who fall into categories 1, 2 and/or 3 as well as category 4, interview priority shall be given to category 4 anglers to ensure that the add-on economic survey does not jeopardize sample size goals for that category. In other words, if a household includes any category 4 anglers, all category 4 anglers (or their proxies) will be asked the base MRFSS questions and one non-proxy category 4 angler will also be asked the add-on economic questions. Category 1, 2, and/or 3 respondents residing in such households will not be interviewed. The interviewer will seek a category 1, 2, or 3 angler only if a household does not include any category 4 anglers. The number of call-backs to obtain an economic add-on interview with a category 4 angler will be governed by the procedures specified in the RDD base telephone survey (see section 5.1.4).

If the initial household contact indicates that no category 4 anglers reside in the household, the next priority is category 2 or 3 anglers. If the initial household contact is such an angler, only that respondent will be interviewed, no matter whether the angler is type 2 or 3. If the initial contact is not such an angler, the interviewer will ask to speak with one such angler. If no such angler is immediately available, the interviewer will conduct the economic add-on with the category 1 (or initial) respondent. No call back will be made to conduct add-ons with type 2 or 3 anglers. Only one category 1, 2, or 3 respondent per household will be interviewed.

4.1.3. CHBTS

The MRFSS CHBTS may be conducted in the Northeast Region, and the South Atlantic and Caribbean subregions from 2002 through 2004.

The CHBTS is also partitioned into waves; however, telephone interviewing is conducted on a weekly basis during all weeks within each wave. A week is defined as Monday through Sunday. The CHBTS survey is conducted on a 10-month basis (March through December or waves 2-6) on the Atlantic coast north of Florida, except for Maine and New Hampshire. The CHBTS survey is conducted on a 8-month basis (March through October or waves 2-5) in Maine and New Hampshire. Wave 1 (January and February) data on the Atlantic coast north of Florida and wave 6 (November-December) data in Maine and New Hampshire may be included in the 2002 survey. If ordered, the RDD survey will be conducted on an annual basis in the U.S. Caribbean and Hawaii subregions.

Data collected in each state includes the number of charter or head boat trips made by each surveyed vessel in the past week, dates of the trips and their duration (half-day, full-day or multi-day), numbers of anglers on each trip, and other trip information.

The GSMFC has been providing the NMFS with the average number of minutes per interview for the CHBTS since October 2000. The average minutes per vessel operator interview (including all attempts) were 9.46 in September, 8.15 in October, 6.31 in November, and 8.89 in December. More up-to-date information will be provided during the procurement process as it becomes available.

4.1.4. CHBTS Economic Add-Ons

The MRFSS economic add-ons to the CHBTS may be conducted in the Northeast, Southeast and Caribbbean regions after the first year of CHBTS sampling effort, therefore we expect this data collection task to be conducted during 2003. Base line data are needed before economic data to allow for modeling. The CHBTS would be collected in the same waves and states as the base CHBTS. This economic add-on has two components: 1) an annual survey for fixed costs that would be conducted by calling a sample of vessel operators, separately from the base CHBTS, and 2) an trip survey economic add-on to the base CHBTS interview for one of the vessel trips in a week. The principal objective of the annual survey will be to obtain an economic profile of the fleet. The principal objective of the trip survey will be to obtain a sample of trips costs on a continuing basis throughout the year for the fleet. Component 1 of the CHBTS economic add-on would be conducted annually through telephone interviews separate from the base CHBTS, and ask questions concerning annual fixed costs. Component 2 of the CHBTS Economic Add-On would add a series of questions to the base questionnaire for one trip

in the week and would be conducted at the same time as the base CHBTS telephone interview. Thus, Component 2 would collect economic data for all vessels profiled for the base CHBTS.

Data collected for the annual survey includes annual expenses such as capital investments, business operating costs, vessel characteristics, current market value of vessel, yearly maintenance costs, annual revenue, and the number of employees. Data collected in for the trip level add-on includes variable trip costs such as fuel, bait, ice, and crew costs, and passenger fares.

4.2. Sample Sizes

The approximate sample sizes shown are provided only to facilitate preparation of cost estimates by prospective offerors. These allocations are provisional and subject to revision. The NMFS will submit delivery orders with actual sampling distributions at least one month prior to each sampling wave for the 2002, 2003, and 2004 RDD and CHBTS telephone surveys.

4.2.1. RDD Telephone Survey

For the 2001 MRFSS, the NMFS allocated 316,476 telephone household interviews among states (U.S. Virgin Islands was not sampled) in proportion to fishing effort, after allocating blocks of sample to each region based on historical sampling levels (Table 1.). The base-level allocations for 2002-2004 are expected to be similar to those of 2001. The allocations are expected to be about 76,000 telephone household interviews on the Pacific coast (California through Washington), about 92,000 in the Northeast Region (Maine through Virginia), about 140,000 in the Southeast Region, and about 13,000 in Hawaii. The distribution of effort used for 2001 was a three year (1998-2000) average of coastal county resident trips by state. Within each subregion/state, a base level of 200 telephone households was allocated for each wave to assure that sufficient data were available to produce estimates. Allocations among waves are also proportional to effort. County allocations within a state are proportional to the square root of the number of full-time, occupied households with telephones in a coastal county divided by the sum for the state of the square root of the number of full-time, occupied households with telephones in all coastal counties.

The sample sizes shown in Table 1. represent the approximate number of interviews that would need to be obtained on an annual basis. For the RDD survey, the sample size is the number of households to be interviewed, and does <u>not</u> include no answer/busy, refusal, non-households, or incomplete interviews of households containing recreational anglers. More complete approximations of the sample allocations at the county level are included in Table 2.

In 2001, the Atlantic Coast Cooperative Statistics Program (ACCSP) allocated funds to increase both telephone and intercept sampling in the Northeast region (Maine through Virginia) by approximately 50 percent over the 2000 sampling levels. This funding resulted in an increase of approximately 44,000 telephone household samples (Table 3.). This increase to base by the ACCSP is expected to continue throughout the contract period, but is not guaranteed. These samples were distributed according to the distribution of the MRFSS samples, after removing the minimum sample per cell among states and waves, so they are strictly based on historical effort.

County samples within a state and wave followed the same proportions as the base level of sampling so they remain allocated by the square root of a county's population.

4.2.2. RDD Economic Add-On

The sample sizes for the economic add-ons generally are based on the total number of household interviews specified in the RDD Telephone Survey, with one respondent per household receiving the economic add-on. The base MRFSS Telephone Survey focuses on anglers who fished in the previous 2 months, with respondents asked to provide detailed information (e.g., date, fishing mode, location) on each fishing trip made in the previous 2 months. The telephone add-on expands the scope of the base MRFSS Telephone by requiring that fishing, demographic and other information be elicited not only from 2-month anglers but also from anglers who have not fished in the recent past and nonanglers. Each household only has the economic add-on administered to only 1 respondent. For the 2002 Northeast economic add-on, the expected sample size is approximately 91,000. The questionnaires given to all categories of respondents are similar except that for categories 2-4 have 1 additional question on fishing days in the past 12 months, and the questionnaire for category 4 anglers may have a few additional questions about their fishing activity. The wave reports contain information by state and wave on the relative proportions of households with type 3 and 4 anglers, which may useful when costing this component of the contract.

4.2.3. CHBTS

Sample sizes for the CHBTS are based on a 10% sampling of boats on a weekly basis or a minimum number of three interviews per week. In some cases for head boats this may result in a census of all vessels in a state. Table 4. shows the distributions of charter and head boats by state based on current information. The current directory contains some boats that are not classified as charter boats or head boats because that information is unknown. For purposes of this procurement, we have assumed that it is more likely that those unknown boats are charter boats rather than head boats. As the directory is updated more completely, this assumption may change and the number of vessels in each category may change slightly for some states. The current scenario for head boats shows the lowest sample sizes expected because the lowest number of vessels in any state is 3 for states with these type of boats. This means if some unknown boats are actually head boats, the sample size for this category may increase slightly and the number for the charter boats would decrease slightly, but overall it would have little effect on the total samples for both categories combined. Table 5. contains the assignment of weeks per wave. Generally, 2 waves in a year contain 8 weeks while the remaining 4 waves contain 9 weeks. The expected sample sizes by boat types, wave, state, and sub-regions are shown in Table 6.

4.2.4. CHBTS Economic add-ons

As indicated above, vessel length, passenger capacity and home port will be used to generate sample draws. For the purposes of this contract, sample sizes will be based on the first year of data in the sample frame and the sample methodology to be presented below. Sampling procedures and target sample sizes for the two components of the economic survey are as follows:

Annual Economic Survey:

The principal objective of the annual survey will be to obtain an economic profile of the fleet. Because the magnitude of annual revenues and costs is expected to vary by area and vessel size, it will be important that the sample size in each area/size category be adequate to obtain statistically valid estimates of revenue and cost. In order to determine the optimal sample size for each area/size category, each vessel participating in the CHBTS will be categorized according to the state in which it made most of its fishing trips and according to size of the vessel ("small" vessels being those that averaged six or fewer passengers per trip, "large" vessels being those that averaged more than six passengers per trip). Using average number of passengers per trip as a proxy for each vessel's size, optimal sample size is defined as the sample size needed to estimate for each boat the

average number of passengers per trip (Xbar_i) with 15% error at a 95% level of confidence within each area/vessel size stratum. The results of this analysis are described in Equation 1.

where

 $n_{oi} = (t_{2i}s_i/e_{2i})^2$

 t_{2i} = t-value associated with 95% confidence level and n_i^* -1 degrees of freedom e_{2i} = acceptable deviation from Xbar_i, in this case 15% of Xbar_i

 $1+(n_{oi}/N_i)$ = finite population correction factor for stratum i.

Xbar_i = means number of passengers per boat trip for vessels in area/vessel size stratum i, as estimated from first year of CHBTS.

 N_i = total number of boats in stratum i that participated in first year of CHBTS n_i^* = sample size in stratum i needed to estimate Xbar_i within 15% of its true value with 95% level of confidence.

Results from a recent survey of for-hire vessel operators in Florida were used to help predict the number of for-hire vessel contacts that would be needed in order to achieve the target sample sizes for this survey. The Florida survey, like the proposed Pacific coast survey, involved telephone interviews of vessels drawn from a sampling frame of all for-hire vessels. Results from the Florida survey indicate that 27% of vessels could not be contacted (answering machine, not at home, etc.), 65% were successfully contacted and responded to the survey and 8% were successfully contacted and refused to participate in the survey. In other words, the contact rate for vessels drawn from the sampling frame was 73%, and the response rate for those vessels that were successfully contacted was 89% (=.65/(.65+.07)). We will use these response rates to calculate the number of attempted contacts. Projected sampling rates are located in Table 7. These sampling levels are approximate and are subject to adjustments based on further information regarding data on the number of passengers per vessel collected during the first year of the CHBTS and using the equation above.

<u>Trip-Level Economic Survey:</u>

Data collected in the first year fo the CHBTS will be used to determine the optimal sample size for the trip-level economic survey, as follows: Trip revenues and costs are expected to be correlated with the number of passengers on board and trip length. Based on this expectation, optimal sample size was defined in two alternative ways:

(1) the sample size needed to estimate average number of passengers per trip with 15% error at a 95% level of confidence, and (2) the sample size needed to estimate average trip length with 15% error at a 95% level of confidence. The larger of (1) and (2) will be deemed the target sample size for the trip-level economic survey. Both (1) and (2) will be calculated using Equation [1], substituting the relevant vessel characteristic for Xbar_i.

These optimal sample size from the procedure above should be compared with the estimated number of completes using the data from the first year of the CHBTS (Equation [2]). If the optimal sample size is not reached using the base CHBTS, sampling rates will be increased in order to reach our goal as stated above, otherwise, the base CHBTS level of sampling will be used. For the Atlantic Coast, the number of completed questionnaires can be roughly predicted as:

$$\hat{n}_i = 3_w \text{ CHBTS}_i * \text{PCTFISH}_{iw} * 10\% * 73\% * 70\% * 89\%$$
 [2]

where

CHBTS_i = total number of for-hire vessels in area i.

- PCTFISH_{iw} = the percent of for-hire vessels in area i that fish during week w, based on the first year of CHBTS data.
- 10% = the percent of weekly participants for which a contact will be attempted, as required by the MRFSS sampling protocol,
- 73% =the percent of weekly participants for which attempted contacts are expected to be successful (based on results of the similarly designed for-hire survey in Florida),
- 70% = the percent of successful contacts who are eligible for the economic survey (i.e., who made a trip during the portion of the week designated by the trip selection procedure),
- 89% = the percent of eligible economic survey respondents who complete the questionnaire (based on results of the similarly designed for-hire survey in Florida).

Projected sample by wave for the base CHBTS is presented in Table 6. We require that one randomly assigned trip be profiled for each add-on. Sampling for the add-on will be no less than these estimates and may be higher based on data collected on number of passengers per vessel and trip length collected during the first year of the CHBTS. Our experience on the West Coast has indicated that the base level of sampling meets our expected goals with regards to strata and estimate accuracy as described above.

4.3. State and Interstate Fisheries Commission Add-Ons

In previous surveys, states and other Federal organizations have funded supplemental levels of sampling to improve state-level estimates or supplemental questions for specific management needs above that ordered by the NMFS. These add-ons are extremely helpful to the MRFSS program for a number of reasons: 1) add-ons improve the precision of the MRFSS estimates and thus provide better data for management, 2) buy-in by states helps build a positive image and public credibility of the Survey, and 3) partnerships with states and commissions help improve understanding of the survey purpose and design by scientists and the general public. Thus it is vital that the Telephone Contractor has the ability and commitment to work in a cooperative manner with the coastal states and commissions to implement these add-ons.

These efforts have been implemented either as an additional delivery order to the NMFS contract or by state contracting directly with the Telephone Survey Contractor. NMFS will provide the Telephone Survey Contractor with a list of state fishery agencies and interstate fisheries commissions. The Telephone Survey Contractor shall work with indivdual state agencies or the commissions wishing to add to the sample size and/or modify the content of the telephone portion of the survey.

Any proposed modifications by states or other entities to the survey must be approved by NMFS in writing in advance of implementation. Any add-on questions or additional sampling paid for by an entity other than NMFS, and collected through the MRFSS shall be included in the data bases provided to NMFS.

The NMFS will not accept add-on samples obtained by any contractor other than the MRFSS Telephone Survey Contractor, as the NMFS can not interfere or monitor contracts between states and other contractors, and thus can not be sure of the quality of that sample.

4.4. Privacy Act Statement

All surveys conducted by the federal government are regulated by the Privacy Act of 1974. This Act stipulates that each person interviewed must be informed of the following: the auspices under which the survey is being conducted, whether participation is voluntary or mandatory, what will happen if they choose not to participate, and how the information will be used. Under the Privacy Act, the person interviewed remains anonymous, the responses to the questions are completely voluntary, and there is no penalty for refusal to answer any or all of the questions. All of the information collected remains completely confidential. The Act is paraphrased on all questionnaires and those statements must be read at the designated point in the screening introduction. A copy of the Privacy Act

Statement (Appendix D) must be in possession of the interviewer and may be read at any point during the interview to reassure a wary respondent.

4.5. Computer Assisted Telephone Interviewing

All interviewing should be done through a Computer Assisted Telephone Interviewing (CATI) system. This requirement is due to the increased efficiencies of CATI over manual paper surveys, and due to the increase in accurate coding through reduction of errors introduced by secondary data entry. CATI systems also increase accuracy through built-in probes, automated looping and skip patterns, and error checks. The Telephone Contractor is responsible for purchasing and maintaining their own CATI system software and hardware (not included in the cost of this contract). The NMFS will provide the current questionnaires in the CATI software version that is currently in use (see the web site http://www.st.nmfs.gov/st1/procurement/mrfss survey.html. The user id is demo and the password is ur2sea). The Telephone Contractor is responsible for adapting the questionnaires to work on their systems. Telephone Contractor will be required to maintain the computer programs necessary for accurate CATI data collection throughout the contract period, and for modifications to the programs when there are changes made in the questionnaire.

For the CHBTS and CHBTS economic add-on, the Contractor is required to use CATI; however, in addition to the sequential interviewing program, construction of a form similar to the ones sent with the notification letters could also be done on a CATI page. This would allow for respondents who have filled in the sent form prior to the interview to simply read off the required information while the telephone interviewer would enter the data onto the form screen. This may result in more efficient interviewing and less respondent burden and frustration for the vessel contacts. The initial screening would be conducted as in the sequential interview but the interviewer would then have the option to proceed with the interview or switch to the CATI form.

The Telephone contractor will also need at least one SAS license (PC or mainframe) in order to run government-supplied sample selection programs and use MRFSS data bases.

5. Survey Sample Frames and Dialing Requirements

Activities specific to dialing samples for the RDD household telephone and CHBTS surveys include:

- 1. Maintaining and updating on a wave-by-wave basis the list of telephone exchanges covering the coastal counties specified by NMFS;
- 2. Identifying and selecting blocks of residential numbers in these counties.
- 3. Generating telephone numbers within blocks using the random-digit dialing procedures described in Section 5.1.;
- 4. Receiving and using the updated CHBTS list from the MRFSS prior to each wave of dialing using the procedures described in Section 5.2.;
- 5. Generating a sample draw for the CHBTS Economic Annual Survey as described in Section 5.3.:
- 6. Generating a 10 percent random sample of vessels for each week in a wave and providing those lists to the intercept contractor(s) prior to the start of the wave for use in validation:
- 7. Mailing reminder postcards to all selected vessel operators prior to the week for which telephone interviewing will be conducted;
- 8. Obtaining the telephone interviews with households, marine recreational anglers, and charter and head boat captains within the required dialing periods in accordance with specified minimum attempts and sampling tolerances.

The sample frames for the economic add-ons are the same as for the RDD and CHBTS.

5.1. RDD

5.1.1. RDD Sample Frame and Random Digit Dialing Method

The sample frame for the RDD telephone household survey includes all full-time, occupied housing units within the coastal counties included in the dialing area for each sampling period. A sample block of working coastal county household telephone numbers must have had at least one residential number assigned to be included in the sample frame. Only permanent residents (greater than six months of a year) of households in coastal counties are eligible to be interviewed as part of the telephone household survey. If the person answering the telephone (e.g., babysitter, house-sitter) is unable to give enough information to determine if the household is eligible, then the household must be recontacted.

Occupied housing units should not include institutional housing such as boarding schools, college dorms, military barracks (although homes on military bases may be included),

prisons, halfway houses, and monasteries. An adjustment for these trips is obtained through the intercept survey. Respondents from businesses, institutional housing, part-year housing, cellular phones, and coin-operated telephones are ineligible. If a business is located at a residence but has a telephone number separate from the residence, then it is considered a business telephone. However, if the telephone number is shared, it is a residential telephone.

Even though a Spanish speaking interviewer must be available (C.6.2.1), there may be occasions that the respondent speaks another foreign language. If the interviewer is unable to talk with anyone else in the household that can communicate in English (or Spanish), then the household is ineligible for the survey because of the language barrier.

A block is defined as the first five digits of the working telephone numbers within an area code. The first three digits (prefix or exchange) are assigned to specific geographical areas by the telephone companies. Prefixes must be used in meeting allocations of calls by county. The fourth and fifth digits are often designated as business or residential use, so blocks including business numbers can be screened out of the sample frame for more efficient dialing. Unassigned blocks also should be eliminated from the sample frame.

The sample frame must be maintained on a continuing basis through the use of current telephone directories, reverse directories (sorted by blocks instead of names) and information from telephone companies, or purchased from a company providing this service. This information is released in a revolving manner rather than once a year, so the updating process must be done on a continual basis, or an updated frame must be purchased prior to each wave. Using this approach, the most current telephone sample would be available for generation of telephone numbers for each dialing period.

The number of households to be dialed in each county must be sub-allocated by screened telephone blocks. The number of calls to each block must be proportional to its occurrence in the population. For example, if 10 percent of all telephone numbers in the county begin with 274-45, then approximately 10 percent of all interviews must be conducted with households in this block. The last two digits are generated randomly. This approach ensures that all telephone households, even those with unlisted numbers, are eligible to be reached in the survey.

If the number dialed has been disconnected and a new number assigned, the new number should not be dialed as a replacement. The primary interest of the survey is not the household, but the randomly generated telephone number and the results obtained when dialing that number.

5.1.2. RDD Sample Draws

The specified number of households to contact shall be exclusive of dialing results of no-answer/busy, refusals and non-households. Historical data on the number of no answer/busy, refusal, non-household, and incomplete interviews shall be used to estimate the size of the initial sample draw. Data for 1999 and 2000 are available from the wave reports on the web site at http://www.st.nmfs.gov/st1/procurement/mrfss_survey.html. The user id is demo and the password is ur2sea.

Once a sample is drawn, all numbers in the sample should be called and completed. Additional draws may be conducted if an underage in quota of completed household interviews occurs; however, all the numbers in the additional draws must be completed. Completed means all numbers in the draw are resolved to fishing and non-fishing households or ineligible number (business, institutional housing, etc.)

5.1.3. RDD Dialing Period

All data collection by telephone shall be made in a two-week period at the end of each wave (i.e. the last week of the two-month period being surveyed and the first week of the next two-month period). Anglers are asked to recall trips taken in the last 59, 60, 61, or 62 days, depending on the actual number of days in the wave. For example, if interviewing takes place on February 22, information can be taken on trips from December 25 through February 21. This results in 59 days of recall, the number of days in wave 1, 2001. Table 8. contains the allowable dates for trips for each wave for 2002-2004. CATI systems should display allowable dates, or interviewers must have a calendar available to help respondents with dates, particularly with weekend dates.

5.1.4. RDD Number of Attempts

A minimum of five calls to each telephone number shall be attempted to categorize the household as an "eligible fishing household" or as a "non-fishing household". When each number is dialed, the telephone should be allowed to ring five times before the interviewer classifies it as a "no answer."

Telephone calls must be made during that time of day that maximizes the potential to contact individuals. These attempts must be stratified by weekend/weekday and day/evening. The pattern of dialing will be such that each number will have at least one

weekday attempt and three night or weekend attempts. At least one of the night-time attempts must also be a weekend attempt. The time delineating day and night is 5 p.m. No calls shall be attempted before 8:00AM or after 9:00PM (local time for the area being called).

For eligible fishing households, occasionally the initial call will not result in complete interviews with all anglers in the household. For anglers not interviewed, the contractor shall continue attempts to contact them until they are interviewed or until the end of the dialing period. Call-backs should be made on an appointment basis if possible. Household members should be questioned as to the best time to call back in order to interview the eligible respondent(s).

5.1.5. RDD Sampling Tolerances

The telephone numbers generated shall be checked and duplicate telephone numbers must be screened out of the generated set of random numbers for each wave. Sampling with replacement across waves is not allowed. No household telephone number shall be included in the sample more than once during a year. This is not a statistical issue, but rather a public perception issue.

The percentage of "no answer"/ "busy" results must not exceed 10 percent of the total calls attempted in any subregion. This may require exceeding the minimum of 5 calls per household.

The percent of two-month fishing households where no angler is interviewed shall not exceed 5 percent in any state and wave.

5.2. CHBTS

5.2.1. CHBTS Directory and Sample Frame

A directory of for-hire boats for Maine through East Florida has been developed for the purpose of implementing the new survey method. The NMFS shall provide this initial boat directory to the Contractor at no cost. Each vessel shall be listed by name and/or state registration number. Names, addresses and phone numbers of vessel operators shall be included in each vessel record. For some vessels, the name of the owner shall be included as one of the operators of the vessel. The frame should contain an identified principal "representative" for each vessel in the initial directory. That principal representative may be the owner, one of the captains of the vessel, or some other person designated by the owner.

The NMFS Beaufort Laboratory conducts the Southeast Head Boat Survey (SEHS) from Virginia through Georgia. Head boats that are surveyed through this program will be listed in the vessel directory, with notation that they are included in the SEHS. Vessels included in the SEHS will not be sampled through the CHBTS.

Maintenance of this directory, including addition of new vessels identified from license files, advertisements, field contact, etc., will be performed by the intercept contractors and commissions during each wave. The Telephone Contractor may need to exchange information obtained during weekly dialing with the intercept contractor for purposes of updating the directory during each wave. Updated directories will be provided by the intercept contractor to the MRFSS team four weeks prior to each wave. The MRFSS team will then immediately supply one sampling directory to the telephone contractor for all areas covered by the CHBTS under the telephone contract.

The Telephone contractor will produce the sampling frame from the directory prior to each wave's dialing. The vessel frame will include only vessels that are eligible. It shall be the responsibility of the Telephone Contractor to update the delivered directory regarding respondent eligibility and cooperation status prior to production of the sample frame. Boats that have been determined to be "ineligible" will not be included in the active frame for each two-month sampling wave. Vessels that are considered uncooperative will be kept in the frame, may be included in the sample draw, but will not be contacted during the dialing period; these vessels will be coded as uncooperative in the weekly data files. The NMFS shall supply the Contractor with a SAS program which should be used to produce the sample frame for each wave. This operation is an integral part of the program used to conduct each week's sample draw (see section 5.2.2. below) and an example is available on the web page at http://www.st.nmfs.gov/st1/procurement/mrfss_survey.html.

To be considered eligible for sampling for a particular two-month period, a vessel record must include the following:

- 1. at least one vessel representative's telephone number,
- 2. the name of the vessel or a registration number (State or U.S. Coast Guard number) for the vessel,
- 3. and evidence that the vessel is currently active in the fishery.

The sample frame of for-hire vessels shall be stratified to two types of vessels: charter boats and head boats (definitions, Section 3.2.). Some boats may operate as charters on some trips and as head boats on other trips. For the CHBTS, each unique vessel will be assigned to only one of the two types of vessel, based on the preponderance of activity. The boat type is a variable in the directory (Appendix M). Within each boat

type, they shall also be stratified by size and/or passenger capacity. Charter boat length categories are 0-26 ft. and > 26 feet. Head boat length categories are determined from the licensed passenger carrying capacity as either 7-40 passengers or > 40 passengers. Boats are also assigned to specific counties.

When a given vessel is selected for telephone sampling, the telephone interviewer should first attempt to contact the principal representative. If that individual is not available, then the interviewer should attempt to contact one or more other known owners or operators of the vessel in question during the week.

Additional informational updates other then the vessel status information specified above which may be obtained by the Telephone Contractor during weekly dialing shall be entered into the directory prior to running the SAS program which produces the sample frame and sample draws. This updated directory and the sample frame shall be provided to the NMFS and the intercept contractor prior to the start of the next wave.

5.2.2. CHBTS Sample Draw

The number of boats to be sampled in each stratum in each week shall be 10% of the total number of boats in the sample frame, or a minimum of 3 vessels per week in a state for each boat type. Fractions should be rounded to the next highest whole number. The NMFS shall supply the Contractor with a SAS program which should be used to conduct each week's sample draw and an example is available on the web page at http://www.st.nmfs.gov/st1/procurement/mrfss_survey.html.

Weekly samples shall be drawn independently for the charter boats and the head boats. In preparation for each sample draw, each stratum's vessels shall be sorted in random geographic order by county of port and by descending vessel length category within each county. After randomly sorting vessels within each port county/vessel length category, the list should be sampled by selecting a random start point on the list and then taking every *n*th vessel on the list. The value of the sampling interval, *n*, should be set such that a sample of 10 % of the boats can be drawn on one complete pass through the list.

Vessels designated as uncooperative remain in the frame but are not included in the sample draw and are not contacted on a routine basis. Once a vessel is identified as non-cooperating, they are kept in the frame and coded as non-cooperative. After the initial 4 months they are re-coded as cooperative and can then be included for sample draws. If they are drawn and remain uncooperative, then they are coded non-cooperative and remain in that status for 6 months. Every 6 months they should be coded as cooperative and tried again in the sample.

If the number dialed has been disconnected and a new number assigned, the new number

should be dialed in order to contact that vessel representative and the sampling frame should be updated. For complete sampling of the weekly angler effort on some vessels, it will be necessary to contact and interview more than one vessel operator. Duplicate vessel operator telephone numbers must be screened out of the generated set of random numbers for each week unless the re-selected number represents a different operator or it is the number of an operator who represents or reports activity for more than one vessel. Replacement sampling is allowed across weeks. At a 10% rate of sampling, it is very likely that vessel operators will be contacted more than once during the course of a survey wave and year. Special tracking procedures must be used to monitor the frequencies with which the telephone sampling contacts individual vessel representatives. The Contractor shall deliver copies of the sample frame and the sample draws for all weeks of a given two-month MRFSS sampling wave to the Intercept contractor at least three weeks prior to the start of the wave for use in their validation monitoring and intercept interviewing. This requirement means that the Telephone Contractor has one week after receiving the current directory to determine eligibility for the frame, to draw the wave's sample and to provide the sample draw to the Intercept Contractor.

5.2.3. CHBTS Vessel Contact Notification

The Telephone Contractor will mail a pre-contact letter (Appendix E) to each selected vessel representative one week prior to the week of their activity that will be profiled, to notify them of their selection for the survey, notify them about the week they will be contacted for data and when the actual telephone call may be expected, and include a form with the basic questions that will be asked.

5.2.4. CHBTS Dialing Period

The CHBTS is stratified on a wave basis; however, within a wave, vessel operators are to be contacted on a weekly basis. Weeks that overlap waves are assigned to one specific wave as shown in Table 5.

All weekly dialings should be completed during the 7-day week following a specified week of fishing (Monday-Sunday). Respondents should be asked to report angler and vessel fishing activity for the prior week that ended on a Sunday. This approach results in a recall period of 7-14 days for all respondents.

5.2.5. CHBTS Number of Attempts

Telephone calls must be made during that time of day that maximizes the potential to contact vessel operators. At least ten attempts must be made on each vessel representative's telephone number(s). All first attempts should be made the first day, and repeat attempts should be distributed among weekend/weekday and day/evening time periods as listed below. At least five additional attempts must be made to reach each representative once a phone contact with a co-resident has been made. When each number is dialed, the telephone should be allowed to ring five times before the interviewer classifies it as a "no answer." Interviewers should continue to attempt to contact vessel representatives until they have either conducted an interview, determined that the boat is no longer operating, or made 10 attempts. The Contractor shall document the results of each attempt for each sampled vessel. The list of dialing results that must be reported in the wave reports is included in Section 9.1.1.

The pattern of dialing for each number should include at least one daytime attempt and three night attempts. The time separating day and night is 5:00 p.m. No calls should be attempted before 8:00 AM or after 9:00 PM (local time for the area being called). Once a vessel representative is contacted, future calls to that individual should be made on an appointment basis. Respondents at the contact number should be questioned as to the best time to call back in order to interview the eligible respondent(s).

5.2.6. CHBTS Sampling Tolerances

Although repeated attempts to contact an individual vessel representative may occasionally result in a final outcome of "no answer", "busy" or "answering machine", the percentage of such results should not exceed 25 percent of the total calls attempted in any state/wave combination. This means the Telephone Contractor may need to exceed the minimum number of 10 attempts to control for this factor. Past experience has found that this type of non-response ranges from 15-25% in low activity waves and 20-30% in high activity waves.

5.3. CHBTS Economic Add-On

5.3.1. CHBTS Economic Add-On Sample Draw

Annual Survey Component

The draw will be based on Equation [1] and will be stratified by average number of passengers carried, a proxy of vessel size, and by state. Approximate sample is listed

in Table 7 and is subject to change based on additional information regarding strata which will be collected during the first year of the CHBTS. This design samples approximately 20% of boats by strata.

Trip Survey Component

For the trip-level survey the sample will be the same vessels drawn for the weekly CHBTS. In the notification letter that is sent for the CHBTS, the contractor will also inform the selected vessel representative that they will also be asked about the trip costs for one of their trips. The Contractor will also include a form showing the economic add-on questions.

In some cases, a different vessel contact may be identified in the frame as the appropriate contact for financial information. For those vessels, additional contacts on top of the base effort telephone contacts will be need and thus the sample sizes will be increased above the base.

5.3.2. CHBTS Economic Add-on Vessel Contact Notification

Annual Add-on

Potential respondents will receive a letter one week prior to implementation of the annual survey informing them regarding the purpose of the survey and requesting their participation. A form describing the survey questions will be included with the letter. One week after the letters are sent out, recipients will be called for a telephone interview. Advance notification of the annual survey and the survey form are intended to allow potential respondents to anticipate a phone call and to give them an opportunity to prepare in advance for the survey. Respondents will be asked to consider returning a completed form via fax if repeated dialing attempts by survey interviewers fail to reach them for an interview within the designated sampling period for the annual survey.

Trip Add-on

Each vessel operator who is notified regarding the CHBTS weekly effort survey will also be requested in the same letter to provide detailed economic information for <u>one</u> of the trips made during the week. The letter will include not only the form describing the weekly trip information being requested but also a form describing the economic questions to be asked regarding the one designated trip - with spaces provided on both forms to allow respondents to record their information prior to the interview. Advance notification is considered crucial to encouraging accurate recall and high response, as it gives

respondents the opportunity to record the requested information in advance of the telephone interview.

5.3.3. CHBTS Economic Add-on Trip Selection

Trip selection will proceed as follows: The letter sent to potential respondents notifying them of their selection for the weekly survey will also request that they provide economic information for the trip made on a specific day of the week (with the day randomly varied among respondents). If no trip was made on that day, the respondent will be asked to report on the first trip made after the designated day but within the same week (with "week" defined as the period Monday-Sunday). Thus for instance, if a respondent asked to provide economic information for a trip made on Wednesday did not make a trip on Wednesday, he will be asked to report on the next trip made during the Thursday-Sunday period after the Wednesday. If no trips were made during Thursday-Sunday, no response to the economic questions will be requested (even if the respondent had made a trip on Monday or Tuesday prior to the Wednesday). This procedure is expected to enhance response rate and reduce recall bias by allowing respondents to identify in advance of the telephone interview the trip for which economic information will be requested. The procedure is relatively simple and can be conveyed to respondents in a straightforward manner, and also allows trips to be selected in a more consistent manner than if the selection were left to the discretion of respondents.

5.3.4. CHBTS Economic Dialing Periods

The CHBTS Annual Fixed Cost survey is stratified on region and vessel size basis. The annual add-on should be conducted during a low activity wave for the for-hire fleet. This period may differ by sub-region, and we would expect the survey period to be split by sub-region if no low activity period could be established for all sub-regions.

The CHBTS Economic Add-on for trip data follows the same dialing period parameters as the base CHBTS...

5.3.5. CHBTS Economic Number of Attempts

Annual Add-on

Telephone calls must be made during that time of day that maximizes the potential to contact vessel operators. At least ten attempts must be made on each vessel

representative's telephone number(s). All first attempts should be made the first day, and repeat attempts should be distributed among weekend/weekday and day/evening time periods as listed below. At least five additional attempts must be made to reach each representative once a phone contact with a co-resident has been made. When each number is dialed, the telephone should be allowed to ring five times before the interviewer classifies it as a "no answer." Interviewers should continue to attempt to contact vessel representatives until they have either conducted an interview, determined that the boat is no longer operating, or made 10 attempts. The Contractor shall document the results of each attempt for each sampled vessel. The list of dialing results that must be reported in the wave reports is same as for the base CHBTS included in Section 9.1.2.

The pattern of dialing for each number should include at least one daytime attempt and three night attempts. The time separating day and night is 5:00 p.m. No calls should be attempted before 8:00 AM or after 9:00 PM (local time for the area being called). Once a vessel representative is contacted, future calls to that individual should be made on an appointment basis. Respondents at the contact number should be questioned as to the best time to call back in order to interview the eligible respondent(s).

Trip Add-On

The number of attempts for the CHBTS Economic Add-on for trip data is included in the base CHBTS, see C.5.2.5 for complete details.

5.3.6. CHBTS Economic Sampling Tolerances

Annual Add-on

The tolerance levels for the CHBTS Economic Add-on for the Annual Fixed Cost survey are similar to the base CHBTS. Although repeated attempts to contact an individual vessel representative may occasionally result in a final outcome of "no answer", "busy" or "answering machine", the percentage of such results should not exceed 25 percent of the total calls attempted in any state/size/trip length combination. This means the Telephone Contractor may need to exceed the minimum number of 10 attempts to control for this factor. Past experience has found that this type of non-response ranges from 15-25% in low activity waves and 20-30% in high activity waves.

Trip Add-on

The tolerance levels for the CHBTS Economic Add-on for trip data are included in the base CHBTS.

6. Survey Questionnaires

Sample RDD, CHBTS, Household Economic Add-On, and CHBTS Economic Add-On telephone questionnaires are included in Appendices F-I and at http://www.st.nmfs.gov/st1/mrfss/. These instructions apply to the 2001 telephone household questionnaires. NMFS reserves the right to make changes in data items for regional or annual customization and in order to improve response rates or accuracy of the responses. NMFS will submit any questionnaire changes to the Contractor at least 30 days before the beginning of the dialing period for each wave. All questionnaires must be approved by NMFS.

6.1. General Instructions

Some general instructions for conducting the RDD and CHBTS interviews and the economic add-ons are:

- 1. <u>Wording</u> The questions to be put to the households, anglers and charter and head boat captains are written out in full for a purpose. Methodological studies have shown that even slight changes in wording, for example, "should" versus "could", drastically influence item response. The interviewer should always read each item on the RDD or CHBTS Questionnaire exactly as it is written. Instructions to interviewers that are not to be read during the interview are written in CAPITAL LETTERS.
- 2. Provide Definitions, Not Answers If the angler or captain asks for the interviewer's opinion about an item, the interviewer should provide a definition for the item in question, rather than supply an opinion or the actual response. For example, if an angler is unsure about whether he was fishing from a head boat or a charter boat, or if a vessel representative is unsure about whether the vessel was operated as a head boat or a charter boat, the interviewer should explain the difference and let the angler or vessel representative decide.
- 3. <u>Codes for Not Applicable Questions</u> As a general rule, items on the questionnaires that are not applicable to a particular angler or captain (i.e., items falling out in skip patterns) are coded with "8"s, as indicated on the questionnaire.
- 4. <u>Codes for Refused Questions</u> As a general rule, items on the questionnaires that are refused are coded with "9"s.

- 5. <u>Codes for Don't Know</u> As a general rule, items on the questionnaires that the respondent does not know the answer to are coded with "9"s and a last digit of "8".
- 6. Right Justify and Add Leading Zeros If an answer does not require use of all boxes provided for an item, the interviewer should right justify the entry and add leading zeros.
- 7. "Other (SPECIFY)" In some cases, the response codes for some data items are not exhaustive and include codes designated "Other (SPECIFY)". If a respondent gives an answer not covered by the pre-coded responses, the interviewer should enter the "other" code and write out the respondent's exact response next to the coding boxes. These written responses should be captured by the CATI program for the data base. Questions requiring written responses will be specifically identified in the statement of work or in the written specifications for questionnaire changes or use of flexible questions.
- 8. <u>Terminate</u> Some responses are followed by the instruction to "TERMINATE."
 When the respondent answers with a response which has the "TERMINATE" instruction following it, the interviewer must thank the respondent pleasantly and say goodbye.
- 9. Maps Maps for the State being dialed must be available to help interviewers determine the county in which cities are located and to help locate areas of fishing. Saltwater cut-off points for rivers are particularly useful to help determine if the respondent was fishing in fresh or saltwater and may be supplied by the MRFSS staff.

6.2. RDD Questionnaire

The following procedures shall be used in obtaining angler and fishing trip information from dialed residential households:

- Households shall be screened to determine if the number dialed is physically in the county being sampled. In some areas, telephone blocks overlap county lines and a number drawn randomly for one county may actually be in an adjacent county. Under current procedures, if the number is not in the designated county, the household is ineligible for interviewing.
- 2. Households shall be screened to determine that the household contacted is a permanent, year-round residence. If the dwelling reached is a summer or winter cottage, for example, the respondent is not eligible for the survey and the

interview is terminated. It is not necessary that the respondent has lived at that residence for two months prior to the survey, so it is okay to take information from people who have just moved in.

- 3. Households shall be screened to determine if any member of the household has gone marine recreational fishing for finfish during the previous two months. The number of people in the household who went marine recreational fishing during the past 2 months and during the past 12 months are recorded;
- 4. If any person has fished in saltwater in the previous two months, then he/she is an eligible respondent and should be interviewed. All eligible anglers shall be asked to:
 - recall their total number of marine recreational fishing trips for finfish made in the past two months
 - b. Beginning with the most recent and working backwards in time for 2 months, respondents are asked for details on each trip, including fishing trip dates, modes of fishing, state and county of the fishing access site, general area of fishing including river and estuarine saltwater cutoff points, type of access (public vs private) for each trip during the previous 2 months for each person, and time of completion of each fishing trip.

If the angler cannot recall details about all the trips within the 2-month period, the interviewer shall attempt to at least determine the mode of all remaining trips.

Appendix F contains a simplified version of the RDD questionnaire that contains the wording of the questionnaire and general flow, without dealing with the complexities and looping of a well-written CATI program. Minor differences in the CATI questionnaire have been made in the past to accommodate cultural and regional sensitivities or data collection partnerships and are shown in Appendix F. There are also minor wording differences based on the answers to previous questions, such as having only 1 member or 1 fisherman in a household versus multiple members and fishermen.

6.2.1. RDD Screening Introduction

Before proceeding with the questionnaire, the interviewer must briefly state the purpose of the data collection and explain how the respondent's name and phone number were selected for the interview. Interviewers should be prepared to answer spontaneous questions that the respondent may have concerning the survey purpose or the intended use of their reported data by the NMFS. This brief statement of the Survey's purpose must always be read to the respondent because it is required under the Paperwork Reduction Act by the U. S. Office of Management and Budget (OMB).

Introduction Hello, I'm calling for a survey about marine recreational fishing being conducted for the National Marine Fisheries Service of the U.S. Department of Commerce. This call may be monitored for quality control and your telephone number has been selected at random. [As needed: May I please speak with an adult in the household?]

The interviewer must also state that the data will remain confidential in accordance with the Privacy Act of 1974. The interviewer must also explain that the respondent=s responses to questions are entirely voluntary. Respondents are not obligated in any way to have to answer any questions that they consider to be an invasion of their privacy. This statement of the voluntary nature of the survey and the confidentiality of the data must always be read to the respondent because it is required by law and by OMB.

The survey is being conducted in accordance with the Privacy Act of 1974, therefore you are not obligated to answer any question if you find it to be an invasion of your privacy.

The telephone household survey screening must generally match the intercept survey in terms of data elements necessary to screen for eligible anglers. For the telephone household survey, it may be most efficient to establish the general purpose of the survey before conducting additional screening. Asking the initial household respondent a very generic initial question like "Does anyone in this household go fishing?" accomplishes this goal.

Q1 How many people in this household go fishing?

Q2-Q4 are for sample quality control and are asked of all initial household respondents (or the next respondent if there are communications barriers with the initial respondent).

 Ω 2 To help me assign your information to the correct location, is the telephone number I've reached you at located in {restore name from sample} county / parish / island / municipality?

This question verifies the location of the household dialed. If the respondent does not know their county of residence, the interviewer should talk to someone in the household that does know. County is referred to as parish for Louisiana, municipality for Puerto Rico, and island for U.S. Virgin Islands or Hawaii. For Puerto Rico, U.S. Virgin Islands and Hawaii, prefixes are not assigned by municipality or island. For these areas the sample is allocated across the entire state in proportion to prefixes and the question is reworded to determine where respondents actually reside: "In what municipality do you live?" or "On what island do you live?"

Q3 Is this your permanent residence? [Interviewer prompt if needed: "Where you live at least 6 months out of the year."]

This question verifies that the household contacted is a permanent, year-round residence. If the dwelling reached is a summer or winter cottage, for example, the respondent is not eligible for the survey and the interview is terminated. It is not necessary that the respondent has lived at that residence for two months prior to the survey, so it is okay to take information from people who have just moved in.

Q4 How many people in total, including yourself, live in your household? Please include those people who fish and who don't fish.

This question provides a cross check against the answer to Q1 to ensure that the respondent is not including people other than household members as fishermen.

At this point, if the response to number of fishermen in the household was equal to zero then the questionnaire skips to the final quality control question (gender) and skips the additional marine recreational 2-month and 12-month fishing screeners.

If there are fishermen identified in question 1, the interviewer reads a specific and detailed explanation of the purpose of the survey, before asking questions to determine the number of eligible 12-month and 2-month fishermen in the household. This detailed description identifies exactly what type of fishing activity qualifies anglers in the household. Based on this description of recreational fishing, saltwater, and finfish versus shellfish, the initial household respondent should be able to say how many eligible anglers reside in the household.

We want to gather information from people who have been recreational saltwater fishing for finfish, not shellfish. Recreational fishing means the primary purpose of the fishing is for fun or relaxation, as opposed to providing income from the sale of fish. We're not interested in trips where your main purpose was to catch fish which you would sell to make money. Saltwater fishing includes fishing in oceans, sounds, or bays, or in brackish portions of rivers. We are not interested in any fishing in freshwater lakes, streams, ponds or rivers.

Q5 How many people in your household, including children and adults, have been recreational saltwater fishing in the last 12 months anywhere in the US (including Hawaii and the mainland) or in a US territory?

Q6 Thinking just about the past 2 months, how many of the people living in your household, including children and adults, have been recreational saltwater fishing in the last 2 months in the US or a US territory?

If the respondent does not know the number of eligible anglers, the interviewer should arrange to talk to someone in the household that does know. The number of 12 month anglers who did not fish in the last 2 months are not kept in the detailed records but are tabulated in the wave reports and kept in those electronic files.

Q7 Record gender of respondent.

The interviewer codes the gender of the initial respondent for all fishing and non-fishing households. These data are not kept in the final data files; however, the distributions of initial respondents by gender and household participation in marine recreational fishing are tabulated in the wave reports. We have found differences between male and female initial household respondents in the percent of households participating in marine recreational fishing, with less participation when the initial respondent is female. These differences may be real since females generally make up less than 20% of all marine recreational fishermen and households headed by women are less likely to fish; however, the survey can not determine the makeup of all households targeted. Therefore, we require these data to provide minimal tracking of this phenomenon.

Finally, for households with eligible 2-month marine recreational fishermen, the initial household respondent is asked to provide first names or an identifying classification such as spouse, mom, dad, oldest child, etc. These are kept in the CATI system until all anglers in the household have been interviewed or have proxy data. These identifiers are not kept in the final data sets. If the respondent is reluctant to give names, the interviewer is instructed to ask for identifiers such as mother, father, oldest child, second oldest child, etc.

Q8 I'd like to ask each person who has been recreational saltwater fishing in the last 2 months a few questions about their fishing trip(s). To simplify the interview, would you tell me the first names of the people in your household who have been saltwater fishing in the past 2 months?

6.2.2. RDD Angler Screening

Angler screening questions must be repeated for each new angler interviewed. Screening for each angler introduces the survey, must cover the definitions that establish eligibility must be repeated (saltwater, finfish, eligible trips), and must paraphrase the privacy act.

Hello, I'm conducting a survey on recreational saltwater fishing for the National Marine Fisheries Service. Recreational fishing means the primary purpose of the fishing is for fun or relaxation, as opposed to providing income from the sale of fish. We're not interested in trips where your main purpose was to catch fish which you would sell to make money. By saltwater fishing, I mean fishing in oceans, sounds, or bays, or in brackish portions of rivers. For the purpose of this survey, it includes only fishing for finfish, not shellfish.

This survey is being conducted in accordance with the Privacy Act of 1974, therefore you are not obligated to answer any question if you find it to be an intrusion of your privacy.

I understand that you've been saltwater fishing in the past 2 months. I'd like to ask you a few questions about your most recent recreational saltwater fishing trips.

We have found that in many cases all the fishermen in the household take all their trips together and they will mention this fact sometime during the interview process. It is more efficient to gather this information at the beginning of the trip profiling to allow better looping and avoid unnecessary burden on the respondents.

Q1 First, did all of the fishermen in your household take all of their fishing trips together over the last 2 months?

For fishermen in the state of Hawaii, we have added questions to determine the magnitude of recreational expense and subsistence fishing. Colleagues in Hawaii were concerned that many fishermen in Hawaii would screen themselves out of the MRFSS survey yet their activity is not thoroughly covered by any other monitoring programs. These questions are intended to screen out all trips by part- or full-time commercial fishermen while allowing their personal recreational trips to be profiled. These questions may or may not be kept depending on initial results.

H1 Which of the following three (3) categories best represents your fishing activities?

- 1. You never sell any of your catch
- 2. You sometimes sell fish to help cover fishing expenses
- 3. You sell fish for profit to pay your living expenses

H2 [If H1=3] Do you consider yourself a full-time commercial fisherman?

1 Yes

2 No

Fishermen are categorized as:

If H1=1, then category=1 (pure recreational)

If H1=2, then category=2 (recreational expense)

If H1=3 and H2=no, then category=3 (part-time commercial)

If H1=3 and H2=yes, then category=4 (full-time commercial)}

- [If category=3 or 4] How many of the total trips that you mentioned were commercial fishing trips? [As needed: For this survey, we consider any trip where you sold some of the catch to be a commercial fishing trip.]
- H4 [If H3 < total trips] Were the other trips purely recreational trips (where you sold none of the catch)?
- H5 [If H4=yes] How many were purely recreational?

If a commercial fisherman's trips are all commercial, that respondent is not eligible for trip profiling. If the respondent has recreational trips those trips are profiled.

6.2.3. RDD Trip Profiling Instructions

All anglers in the household must be interviewed separately about their fishing trips in the last two months. There are exceptions to this rule (see Proxy Data, C.7.xxx).

<u>Two-Month Trips</u>: The first questions determine the total numbers of all days with fishing trips made in the previous two months. An inadvertent change in procedures in waves 1-3 of 1993 resulted in the discovery that this question is critical for the respondent to "commit" to the profiling of all of his/her trips. These beginning questions ask first for the total days with fishing trips made in their state of residence and then for any days with trips made elsewhere in the U.S.

- QT1 On how many days in the past two months, between {TODAY- days in wave} AND {TODAY-1}, did you (s/he) go recreational saltwater fishing in {state of residence} or in a boat launched from {state of residence}?
- QT2 On how many days in the past two months, between {TODAY- days in wave} and {TODAY-1}, did you (s/he) go saltwater fishing in any coastal state or territory of the US other than { state of residence} or from a boat launched from another coastal state or territory of the US?

The following questions are then asked for each fishing day (total of QT1 and QT2) in the wave until all trips are profiled.

<u>Date of Trip</u> - Beginning with the most recent trip, the interviewer must ask and record the date (month and day) of the fishing trip. If the respondent cannot recall the exact day of the month, the interviewer should probe for the month, and whether it was a weekend (including holidays) or a weekday day. In that case the month and day type are recorded, and "00" is recorded as the day. The CATI system should display allowable dates, or interviewers must have a calendar available to help respondents with dates, particularly with weekend dates.

QT3 [Ask for 1st trip] When did you (s/he) last go saltwater fishing? Or [Ask if not 1st trip] When was the next most recent saltwater fishing trip? I have a calendar with me in case we need to look up some of the specific dates.

QT3a [If respondent can't remember the date in Q3, ask] Was that a weekday or weekend?

If a angler cannot recall all the trips within the two month period, the interviewer must note the date they stopped counting. The angler must then be asked to estimate the number of trips and mode(s) of fishing during the period between their last reported trip date and the beginning of the two month period. A trip record is created for each trip even if complete details are not remembered.

Mode of Trip - There may be more than one fishing trip within a day and all such trips should be profiled. If more than one mode was used during a fishing day, the interviewers should record each mode (shore, private/rental boat or charter/head boat) as a separate trip; however, if a fisherman made 2 outings in the same mode in a day, that only counts as one trip. Interviewers must record a single fishing mode for each trip. Respondents should be given definitions of particular modes if they have difficulty categorizing their fishing activity.

QT4 On that day, did you (he/she) fish from a boat?

If no, skip to QT5 for shore fishing.

QT4a [Ask if Q4 =yes] Was that from a ... [read]

- 1 Party or head boat -- CATEGORY B
- 2 Charter boat -- CATEGORY B
- 3 Private boat -- CATEGORY C
- 4 Rental boat -- CATEGORY C
- 5 Boat don't know what type -- CATEGORY C

A respondent may choose up to two responses for the day but the two responses can not be from the same category, i.e. a respondent could choose the following boat mode combinations: (1&3) or (2&3) or (1&4) or (2&4).

During 2002-2004 in the Gulf of Mexico and during 2003-2004 in East Florida, all charter and head boat trips are ineligible. The contractor may choose to profile or not profile these trips, as they may be easily screened out of the data. It may be easier and less disruptive to the flow of the questionnaire to continue to profile the trips than trying to explain why we aren't collecting them to the respondent.

Charter/party trips made by charter/party boat captains and crew members as business trips are not eligible and should not be profiled, although trips made by captains or crew for their own pleasure are eligible. The first time a respondent chooses the charter or party boat mode, probes to better identify which of these for-hire modes is accurate and to screen for captain and crew trips should be employed. Data collected by these probes are kept in the final data bases. These probes include:

QT4b [If party/head boat, ask:] Are you the captain or mate of a party or head boat? [If charter boat, ask:] Are you the captain or member of the crew of a charter boat?

If QT4b is yes, then the interviewer is to provide clarification to screen out trips with paying customers and only gather trips on private recreational trips the captain or crew took for their own pleasure.

For this survey, we are only interested in those trips you might have taken for your own enjoyment where you did NOT have paying customers. From now on, please only tell me about trips where you did NOT have paying customers.

Even if the respondent has one or more boat trips, the interviewer must ask if there were any shore trips made that day.

QT5 On that day, did you (he/she) fish from the shore? On that day, did you also (he/she) fish from the shore? (If QT4 was "Yes")

QT5a [Ask if QT5=yes] Was that from a ... [read]

- 1 Pier
- 2 Dock
- 3 Jetty / Breakwater
- 4 Bridge / Causeway
- 5 Other manmade structure
- 6 Bank / Beach

The CATI program should assign a consecutive trip number for each trip by an individual angler.

Some unusual responses to fishing mode and their proper coding are detailed below:

IF THE ANGLER SAYS:	CODE:
Sea wall	4-Other man-made structure
This used to be a bridge but it is now used as a fishing pier.	1-Pier
I hired and fished from a guide boat.	7-Charter boat
I boated to a pier, got out of the boat and fished from the pier.	1-Pier
I boated to an oil platform, got out of the boat, and fished from the oil platform	4-Other man-made structure
I boated to a beach/bank, got out of the boat and fished from the beach/bank	5-Beach or bank

<u>State of Fishing</u> - Interviewers should record the three digit FIPS code for the state of fishing, or if fishing from a boat, the state where the boat returned should be coded. Trips to all coastal states and U.S. territories are eligible and the CATI system should provide a list of those coastal states. Trips to inland states are not eligible.

QT6 [For boat trips, use:] To what coastal state or US territory did the boat return? [For shore trips, use:] In what state or U.S. territory were you fishing? [Prompt as needed with a list of states]

<u>County of Fishing</u> - Interviewers should record the three digit FIPS code for the county of fishing, or if fishing from a boat, the county where the boat returned should be coded. If the respondent does not know the county of fishing, try to elicit a town or port name that can be later related to county. A list of allowable coastal counties that actually have salt water fishing sites within the county boundaries is included (Appendix C). If the county response is not included on the list, the trip would not be considered eligible.

QT7 [For boat trips, use:] To what coastal county/parish/island/municipality did the boat return?
[For shore trips, use:] In what coastal county/parish/island/municipality were you fishing?

If the respondent did not know the county of the trip - probe for a city or town.

QT7a Do you know the name of the city or town that you (he/she) returned to?

<u>Boat Access Type</u> - In order to gauge how much fishing activity is originating from private access sites, where the intercept survey can not easily be conducted, a question concerning the access site type is asked.

QT8 [For boat trips only:] Does the public have access to the place from which the boat left, or is it private access only?
[For shore trips only:] Does the public have access to the place where you were fishing, or is it private access only?

<u>Time of Return</u> - The interviewer should record the hour (24 hour system), with am/pm, that the fishing trip ended. These data are needed to compare the distribution of trips by time of day in the telephone survey with the distribution of trips by time of day in the intercept survey as a quality control measure for the intercept survey. If the angler says "depends on tides", that response is coded as is.

QT9 [For boat modes use:] To the closest hour, at what time did the boat return? [For shore modes use:] To the closest hour, what time did you stop fishing?

<u>Type of Water Fished</u> - Anglers are asked what type of "water body" they did most of their fishing in during that day's fishing trip. Follow-up questions are necessary for responses of river, bay or estuary, and inlet to ascertain whether fishing was in saltwater or freshwater and to ascertain ocean versus inland. The county of trip should be used to pull up only the relevant codes for that county.

QT10 Was most of your fishing effort that day in the ocean, a sound, a river, a bay or an inlet?

QT10a [If QT10 = river] What river was that? Were you (was s/he) upstream or downstream of the cutoff point, which is {read cutoff}?

The saltwater/freshwater cut-off points may vary by wave and new lists will be provided by NMFS to the contractor at least 30 days before each dialing period. These changes are expected only for a few states and are expected to be minimal (i.e one set of definitions for dry waves and another for more rainy waves). The CATI program shall include the defined saltwater/freshwater boundaries for all states. These screening definitions should be used when a respondent indicates they were fishing in a river or estuary.

<u>Washington Punch Card Areas</u> - For the state of Washington, a question is asked to determine which state punch card area the respondent was fishing in.

QT10b What punch card area were you (he/she) fishing in?

<u>Salmon fishing on the Pacific coast</u> - Fishing trips for salmon on the Pacific coast are to be flagged. To avoid duplication with ongoing state survey efforts for salmon, all fishing trips targeted on salmon in California, Oregon, and Washington are to be flagged.

QT10c Were you (was s/he) targeting salmon?

Boat trips to Foreign Waters - All fishing trips where boats traveled to foreign waters (Canadian, Mexican, Caribbean, etc.) but the access site was a U.S. port are to be flagged. These are only possible for certain areas: San Diego county in California, Clallum, Watcom, or Snohomish counties in Washington, Washington county in Maine and Miami-Dade and Monroe counties in Florida. Trips made by households where they traveled to a foreign country and fished while there are not eligible and are not kept in the data base.

QT10d Did you (s/he) fish in foreign waters and return to a US port?

<u>Hawaii Questions</u> - Questions were added for trips in Hawaii concerning species targeted and gears used. These questions were added to gain urgently needed information prior to the intercept survey becoming operational. These questions may be dropped at some point if analyses show the intercept data provide better accuracy and if intercept sample sizes are adequate for management needs.

QHT1. Were you targeting any particular kinds of fish on this trip?

QHT2 What kind of fishing did you do on this trip? Was it trolling, hand-lining, bottom-fishing, casting with a rod and reel or pole and line, netting, scuba or spear-fishing or something else?

QHT2a [If QHT2 = hand-lining] And what method of hand-lining was that? Tuna hand-lining, deep water bottom-fishing, or shallow water bottom-fishing or something else?

[If QHT2 = bottom-fishing] And what method of bottom-fishing was that? Deep water bottom-fishing, shallow water bottom-fishing, both deep and shallow or something else?

QHT3 [If category fisherman 2-4] Did you sell any of your catch on this particular trip?

If an angler attempts to terminate an interview before all trips are profiled, the CATI system should allow the interviewer to skip to a section where they can record all remaining trips by mode, if possible, and skip the rest of the trip details.

At the end of each trip profile, the CATI program should loop to the next logical action:

- 1) profile the next most recent fishing day and trips, or
- 2) if all trips are profiled, thank the respondent and either terminate the interview or ask for the next available angler.

That concludes the questions that I have about your fishing. Thank you very much for your time and assistance.

If there are additional anglers in the household who still need to be interviewed, ask: "Now, may I please speak to: "

If respondent indicates that one or more of the people list are children, ask current respondent to continue answering the questions based on the child's fishing activities.

6.2.4. Flexible Questions

Besides the basic questions concerning the angler's trip, catch and effort, NMFS reserves the right to add up to ten questions per household or 2-month saltwater fishing participant or five questions per trip for saltwater participants which may vary geographically and temporally to address specific resource management concerns (for example: marine mammal or sea turtle sightings, attitudes and opinions concerning management options, basic economic questions). In the past, NMFS reserved the right to add up to five questions per interview; however, for some needs such as basic economic modeling or determining the extent of subsistence fishing, five questions were too limiting. In general, eight to ten questions provide the necessary level of data. In practice, these additions to the questionnaires have been found to add little or nothing to the cost of conducting the interviews, and they have not affected overall response rates. NMFS is concerned with possible affects of unnecessarily long interviews and will keep the number, length, and complexity of these questions to a minimum.

NMFS will submit any supplemental questions to the Contractor at least 30 days before the beginning of the dialing period for each wave. Also, the flexible questions will not be exercised in the same region and in the same year as an economic add-on.

6.2.5. Obtaining Proxy Data

Proxy data is information obtained from someone in the fishing household <u>other than</u> the angler. The collection of proxy data is preferable to missing data. Proxy data may be collected immediately if the initial respondent indicates that all household trips were made as a group or if anglers in the household include small children. If the initial respondent volunteers that all household trips were made as a group then their responses can be duplicated for the remaining household anglers without separate interviews. An adult can speak for a small child if he/she is knowledgeable of the child's fishing trips.

In other cases where an angler cannot be interviewed, it may be necessary to ultimately gather the best information available on that person's trips from another household member, rather than have completely missing information. Other occasions that would require responses from an individual about another household member's trips would include language barriers, extended travel away from the household, hospitalization, or even death. If more than five callback attempts fail to reach a particular angler, the collection of proxy data is preferable to missing data.

For these types of proxy data (other than group or small children), the guidelines for collection of proxy data are: 1) asking specific questions before obtaining proxy data; 2) prioritizing information collected (trips, then mode, then dates); and 3) omitting questions regarding detailed trip information after the first "don't know" response. If a proxy respondent does not know the total number of trips made in the last two months, no proxy data is obtained. Proxy data is identified through the variable "SOURCE" (coded '2') in the Type 2 telephone data sets.

6.3. RDD Economic Add-On Instructions

General Procedures

The economic add-on telephone survey will be administered to 2-month saltwater anglers, saltwater anglers who have fished in the last 12 months but not in the last 2 months, anglers who have fished before but not in the last 12 months, and non-fishing respondents. Respondents at least 16 years of age are eligible to complete the survey. If an individual is under the age of 16 or an interviewer is unable to determine the age, then terminate and thank respondent.

The survey design calls for interviewing household members who would not be surveyed within the usual MRFSS telephone survey. As described in Section 4.1.2., there are four categories of respondents, although there are only two questionnaire

versions. NMFS reserves the right to make adjustments to these questions and add no more than four additional questions to either version no later than 60 days prior to the start date of the add-on.

Category 1

If the initial respondent answers negatively to the question "Does anyone in this house go saltwater sport fishing?", the interviewer should proceed to Part 2.

Categories 2 and 3

If the initial respondent indicates there are saltwater anglers in the household but no one fished in the last two months, the interviewer will attempt to interview one of those anglers. If the respondent who first answered the call is an angler, only that respondent will be interviewed. If the initial respondent is not an angler, the interviewer will ask to speak with one of the anglers. If no angler is immediately available, no one should be administered the economic questionnaire, the interview should be terminated, and no call back should be made. If an angler is available at the time of the initial MRFSS call, version A of the Economic Questionnaire should be administered. Only one angler per household should be interviewed. Category 2 anglers are those who have not fished in the last year. Category 3 anglers are those who have fished in the last year but not in the last two months.

Category 4

This category is 2-month saltwater anglers who are administered the routine MRFSS interview about fishing trips. Version B of the Economic Questionnaire is to be administered to only one of the category 4 respondents in a household. Version B should be administered to the first category 4 respondent at the end of the trip profiling, in order to ensure at least one add-on per category 4 household (other fishermen in the household may not ever be available for interviewing or may only be available through proxy interviews). The Economic Questionnaire is **not** to be administered when obtaining proxy information.

Telephone Survey Instrument

Version A, Part I

Version A is composed of two parts: (1) a Screening Questionnaire, and (2) an Economic Questionnaire. Category (1) respondents skip the screening question and go

directly to Part I. Category (2) and (3) respondents begin in Part I and proceed to Part II. Category (4) respondents do not participate in Version A and would go directly to Version B at the completion of the MRFSS trip profiles. Part I determines if the initial telephone respondent is a saltwater angler and can be administered the Economic Questionnaire. If the initial respondent is not eligible, the interviewer requests to speak to an angler and when successful, introduces the survey to the angler and begins Part II. Part II elicits demographic and economic information from the respondent.

- Item 1 Whether or not an individual has been taken fishing as a child has great explanatory power when looking at future and/or continued saltwater sport fishing participation. Respondent should include any trip taken as a child that was initiated by a parent, guardian, relative, friend of the family, boy or girl scout troop, church group, other community group, etc. Interviewer should enter "1" for yes and "2" for no.
- Item 2 This question is used to screen for category (2) anglers. If they are category (2) anglers, proceed to Part 2.
- Item 3 This question is used to screen for category (3) anglers. If they are category (3) anglers, proceed to the next question.
- Item 4 This question obtains the number of saltwater sport fishing trips taken in the last 12 months. Interviewer should enter the number of trips.

Version A, Part II

- Item 1 Boat Ownership Angler is asked if he/she currently owns a boat that is ever used for recreational saltwater fishing. If an angler's answer is yes, code "1"; If no, code "2".
- Item 2 Year of Birth Interviewer shall ask the year of birth of the respondent. If the respondent hesitates, doesn't know, or refuses, quickly go to question 2a.
- Interviewer shall ask this question if unable to obtain year of birth during Q.2. Code 65 and over, "6", 56 to 64, "5", 46 to 55, "4", 36 to 45, "3", 26 to 35, "2". and 16 to 25 as "1".
- Item 3 Gender Interviewer should enter "1" for male and "2" for female. If uncertain, simply ask for respondents' gender.

- Item 4 Spanish or Hispanic The respondent is asked if he/she is of Spanish or Hispanic origin or descent. Code "1" for no, "2" for Mexican/Mexican American/Chicano, "3" for Cuban, "4" Puerto Rican, and "5" for Other Hispanic/Latino.
- Item 5 Race The list of ethnic background descriptions should be read and coded as follows: white, "1"; black, "2"; American Indian, "3"; Asian, "4"; and other (specified) as "5".
- Item 6 Education The list of choices should be read if the respondent hesitates and coded as follows: less than a high school degree, "1"; high school graduate, "2"; some college, no degree, "3"; associates degree, "4"; bachelor degree, "5"; master degree, "6"; professional degree, "7"; and post-graduate degree, "8".
- Item 7 Employment Status If individual responds yes, code "1" and go to Q.7a; if no, code "2" and go to Q.7b; and don't know or refused, go to Q.8.
- Item 7a Employment Type This question is asked only to individuals who indicate in Q.7. they are employed. Code part-time employed as "1", full-time employed as "2", and variable as "3" and then go to question 8.
- Unemployment Type This question is asked only to individuals who indicate in Q.7. they are unemployed. Code looking for employment as "1", retired as "2", full-time homemaker as "3", student as "4", disabled as "5", and other (specify) as "6", and then go to question 8.
- Item 8 Household Income Please read the categories, stopping at the category. Code less than \$15,000 as "1", \$15,001 to 30,000 as "2", \$30,001 to \$45,0000 as "3", \$45,001 to \$60,000 as "4", \$60,001 to \$85,000 as "5", \$85,001 to \$110,000 as "6", \$110,001 to \$135,000 as "7", and \$135,001 to \$160,000 or more, as "10".

Version B

Interviewers will ask these questions of those individuals who fished in saltwater in the last two months (routine MRFSS trip questionnaire respondents). Version B is identical to Version A part II except for the addition of the following questions, which should be inserted at the beginning of Version A part II. The use of two versions give NMFS the flexibility to add trip specific question for type (4) respondents. While no trip specific questions are included here, NMFS reserves the right to add up to 5 trip level questions to be asked in reference to the most recent trip.

Item 1 Whether or not an individual has been taken fishing as a child has great explanatory power when looking at future and/or continued saltwater sport fishing participation. Respondent should include any trip taken as a child that was initiated by a parent, guardian, relative, friend of the family, boy or girl scout troop, church group, other community group, etc. Interviewer should enter "1" for yes and "2" for no.

Item 2 This question obtains the number of saltwater sport fishing trips taken in the last 12 months. Interviewer should enter the number of trips.

6.4. CHBTS Questionnaire

The following procedures shall be used in obtaining fishing trip information from charter and head boat contacts from the CHBTS directory:

- 1. Contacts shall be screened to determine if the vessel is eligible and the scope of the survey will be explained to the respondent.
- 2. Contacts shall be asked to report the total number of trips made by the selected vessel in the past week.
- 3. Each trip shall be profiled for activity type and other effort information.

Appendix G contains the CHBTS questionnaire that contains the wording of the questionnaire and general flow.

6.4.1. CHBTS Screening Introduction

Before proceeding with the questionnaire, the interviewer should ask to speak to the boat representative, briefly state the purpose of the data collection, and screen to make sure the respondent is an eligible contact. Only current owners, operators or otherwise designated representatives of listed vessels are eligible to be interviewed as part of the pilot for-hire vessel telephone survey.

Hello, my name is {interviewer's name}. I'm calling for a survey being conducted for the National Marine Fisheries Service of the United States Department of Commerce.

Q1 Am I speaking to {selected contact name}?

If the person answering the phone indicates that the designated representative of the selected vessel is unavailable, then the interviewer should ask for an appropriate time

to call back and then make another contact attempt at that time. If the interviewer is unable to talk with anyone in the household that can communicate in English, then the vessel becomes ineligible for the survey because of the language barrier.

If the person sought does not answer the phone, it may be difficult to determine potential eligibility. Asking an initial question like "Does <u>name of vessel representative</u> operate a charter boat, head boat, or guide boat?" will accomplish this goal. This data can potentially be useful in determining whether a listed, but non-contacted, vessel operator operates an ineligible boat or is simply a non-respondent.

After successfully contacting the vessel representative sought for interview, it will be necessary to ask a series of screening questions to determine whether the individual contacted is still an appropriate representative who can accurately report on all of the vessel's activity, whether there is another person who must be contacted, and whether the vessel is still being operated. Respondents who are no longer operating the vessel for which they are listed are ineligible to provide information on that vessel.

Q2 Are you still the captain, owner or designated representative of the {boat name}?

<u>Valid vessel representative</u> Does the person contacted consider himself, or herself, to be qualified to report on at least some of the designated vessel=s activity? If no, then the interviewer must ask additional questions to determine whether the vessel is no longer operating or whether it is now operated by somebody else. If the vessel is now operated by somebody else due to a change in owner(s) and/or operator(s), then the interviewer should probe to obtain a name and/or telephone number of the new vessel representative. If the contact person cannot provide information on a new owner and/or operator, then thank the respondent for his/her time and terminate the interview. If the *vessel* is no longer operating, then the interviewer should note that the vessel is now "inactive", thank the respondent, and terminate the interview.

Q3 Can you give me the details of the activity of {boat name} during the last week {Monday - date - through Sunday - date}?

Able to report all activity - Once the contacted person has been identified as a valid vessel representative, the interviewer should ask to determine whether the respondent is capable of reporting on all of the subject vessel=s activity during the prior week. If the respondent can only report on some of the vessel=s activity, including trip costs, returns, and other financial data as included in the CHBTS Economic Trip Add-on, then the interviewer must probe to determine the names and telephone numbers of other vessel representatives who could report on the remainder of the vessel's activity during the prior week. If other vessel representatives are identified and their information is required, then the interviewer should attempt to contact them for interviews after the current interview is completed.

Next the interviewer must explain the purpose of the survey, explain how the respondent's name and phone number were selected for the interview, and refer to the Privacy Act of 1974. Interviewers should be prepared to answer spontaneous questions that the respondent may have concerning the survey purpose or the intended use of their reported data by the NMFS. The brief statement of the Survey's purpose must always be read to the respondent because it is required under the Paperwork Reduction Act by the U. S. Office of Management and Budget (OMB).

We're surveying owners and operators of charter and head boats to collect data needed to estimate total marine recreational fishing trips by individual anglers. The {boat name} has been selected at random form a directory of charter and head boats to be included in this week's survey of trips.

The interviewer must also state that the data will remain confidential in accordance with the Privacy Act of 1974. The interviewer must also explain that the respondent=s responses to questions are entirely voluntary. Respondents are not obligated in any way to have to answer any questions that they consider to be an invasion of their privacy. This statement of the voluntary nature of the survey and the confidentiality of the data must always be read to the respondent because it is required by law and by OMB.

I would like to ask you a few questions about trips made last week by the {boat name}. This data will remain confidential. This survey is being conducted in accordance with the Privacy Act of 1974, therefore you are not obligated to answer any question if you find it to be an invasion of your privacy.

This call may be monitored or recorded for quality control. These quality control measures let us ensure your data are recorded accurately and helps us find ways to improve the survey.

The interviewer then asks the total number of trips made and if any were multi-day trips. The trips must be saltwater, with paying passengers, and targeting finfish. Trips targeting shellfish species should not be counted. This count should include only recreational fishing trips taken as a "for-hire" boat, not recreational fishing trips taken as a "private" or "rental" boat, nor trips made for commercial (commercial fishing, whale-watching, oil rig supply) or other activities (getting bait or fuel).

Q4 During the last week {Monday, date, through Sunday, date} how many saltwater fishing trips targeting finfish did the {boat name} take with paying passengers?

The interviewer also asks the respondent to report the number of trips reported in response to Q4 that "consisted of more than one day of fishing". These trips, when individually profiled later in the interview, should be split into two or more day-trip records in the resulting database.

Q5 How many of these trips consisted of more than 1 day of fishing?

6.4.2. CHBTS Trip Profiling

After the total number of trips are determined the CATI program loops through each day of the week to see if a trip or trips were made. Interviewers must have a calendar available to help respondents with dates, particularly with weekend dates.

If the respondent cannot recall all the trips within the week, the interviewer must note the date they stopped counting. The respondent must then be asked to estimate the number of trips in each mode of fishing ("charter", "head", or "other") during the period between their last reported trip date and the beginning of the week. A trip record should be created for each trip even if complete details are not remembered.

<u>Day and Date of Trip</u> - For each marine recreational fishing trip reported for the vessel, the interviewer must determine the day (Monday, Tuesday, etc.) and the date (Year/Month/Day). This is best determined by starting with the most recent day (Sunday) and working back through the week one day at a time to ask about each trip one trip at a time.

Let's begin with last Sunday {date} and we'll work our way back to Monday {date}. I have a calendar with me if necessary.

QT1 Did your vessel take any saltwater fishing trips with paying passengers that ended on Sunday {date}?

<u>Sequential Trips in a Day</u> - If the respondent reports more than one trip on a given day, then the interviewer should ask separately about each trip and identify each as the first (1), second (2) or third (3) trip of the day.

QT2 How many saltwater fishing trips did {boat name} take with paying passengers that ended on Sunday {date}?

After the trips made each day are listed, the interviewer begins profiling each individual trip.

Now let's talk about the first trip the {boat name} took with paying passengers that ended on Sunday {date}.

<u>Mode of Trip</u> - This question asks the respondent to identify how the payment was made (paid as a group or paid per head) in order to determine the mode of the trip.

QT3 Did passengers pay as a group to charter the boat or did passengers pay on a perhead basis for fishing space on the boat?

If the respondent seems confused when asked mode of trip, the interviewer should provide the survey definitions of "charter" and "head" boat trips and probe for the correct mode.

<u>Passengers Who Went to Fish</u> - For each trip, the interviewer must ask for the number of passengers who went to fish. The captain and crew of the vessel should not be included in this count if the vessel trip was a "for-hire" trip. This should be a count of the number of passengers who intended to fish, not those who actually fished. If the respondent reports a count of more than six for a "charter" trip or less than seven for a "headboat" trip, the interviewer should check to confirm that the reported mode of the trip is consistent with the survey definition for that mode.

QT4 Excluding captain and crew, how many people went to fish on this trip?

<u>Passengers Who Actually Fished</u> - For each trip, the interviewer must ask for the number of recreational anglers who intended to fish but did not. Since we assume that this number will usually be "0", we ask it as

QT5 "Did all of the {number for QT4} people fish on the trip?"

If the respondent says "No", then the interviewer should ask for a count of those who did not fish. The captain and crew of the vessel should not be included in this count if the vessel trip was a "for-hire" trip. This should only be a count of the passengers who intended to fish for the primary purpose of recreation but for some reason chose not to fish once at sea. Both the number who did not fish and the number who did should be entered in the telephone survey record for each reported trip.

These data (QT4 & QT5) are crucial for estimation of fishing effort in terms of the number of angler fishing trips, rather than the number of vessel fishing trips. It is important that we do not count passengers who would not be eligible for a MRFSS Intercept Survey interview if intercepted. The survey is specifically designed to estimate effort in terms of <u>angler trips</u> so that such effort estimates can be combined with MRFSS intercept survey estimates of <u>catch per angler trip</u> to obtain estimates of total catch.

<u>State of Trip</u> - For each trip, the interviewer must ascertain that the trip was taken from an access site (marina, dock, or launch ramp) located in the state of the boat's home port.

QT6 Was this trip taken from a marina, dock or launch ramp in the {boat's home state}?

<u>County of Trip</u> - For each vessel trip, the interviewer must ask the respondent to indicate the county from which the trip was made. This information is needed to determine the geographic distribution of fishing effort within states.

QT7 From what county was the trip taken?

<u>Public vs. Private Access</u> - For each vessel trip, the interviewer should ask the respondent to indicate whether the trip was taken from a site to which the public normally has access. This information is needed to determine the distribution of fishing effort between private and public access sites. Most of the MRFSS intercept survey interviewing is restricted to public access sites. It is important to determine what proportion of the total fishing activity is being missed by the sampling for the intercept survey.

QT8 Was this trip taken from a marina, dock or launch ramp to which the public normally has access?

<u>Fishing Method(s)</u> - For each trip, the interviewer should ask the respondent to indicate the fishing method or methods used. The interviewer may record up to two methods. If only one is provided by the respondent, it not necessary to probe for a second method. The first reported method should always be recorded as METHOD1 and the second reported method recorded as METHOD2.

QT9 What fishing method or methods (trolling, bottom-fishing, casting or drifting) were used on this trip?

<u>Target Species</u> - For each trip the interviewer must ask the primary target species sought. A list of the most common species targets in each state will be provided and used for coding.

QT10 What was the primary target species for that trip?

<u>Primary Fishing Area</u> - For each trip, the interviewer should ask the respondent to indicate the water body type in which most of the fishing occurred? The most important objective here is to distinguish between "ocean" and "inland" saltwater fishing. Ocean, gulf or open bay fishing is considered to be "ocean" fishing. Sound, river or enclosed bay fishing is considered to be "inland" fishing. It is also important to distinguish between saltwater and freshwater therefore the new saltwater cutoff points will be used for answers of river and some estuaries and bays.

QT11 Was most of your fishing effort on that trip in the ocean, a river, a sound or a bay?

QT11a What river was that? Were you (was s/he) upstream or downstream of the cutoff point, which is {read cutoff}?

<u>Distance from Shore</u> - For each trip during which fishing primarily occurred in the ocean, gulf or an open bay, the interviewer should ask the respondent to indicate the approximate distance from shore where most of the fishing occurred. The interviewer should ask the respondent to distinguish between the areas greater than 3 miles from shore (the Exclusive Economic Zone) and less than 3 miles from shore (the State Territorial Seas).

QT11b Was most of your fishing effort less than or greater than 3 miles from shore?

Return Time - For each trip, the interviewer should ask for the approximate time that the vessel returned to the marina, dock, or launch site. This information is important for corroborating pre-contact respondent validation visits. If a pre-contact field visit conducted between 12:00 noon to 1:00 PM found the vessel in its slip and a trip was reported for the same day that returned at 11:00 AM, we could determine that pre-contact visit was unable to validate that trip.

QT12 At what time (to the nearest ½ hour) did your boat return from that trip?

<u>Fishing Hours</u> - For each trip, the interviewer should ask the respondent to estimate to the nearest half-hour how much time was actively spent fishing with gear in the water. The fishing hours for a given trip cannot exceed 24 hours.

QT13 To the nearest half-hour, how much time was spent actively fishing with gear in the water?

<u>Multi-Day Trip</u> - If the respondents indicated in response to Q5 that no multi-day trips were taken during the week, then this question should be skipped. Otherwise, for each trip profiled the interviewer should ask if the trip "covered more than one day of fishing".

QT14 Did this trip cover more than one day of fishing?

If the trip was a multi-day trip, then the interviewer should ask how many fishing days the trip covered. For such multi-day trips, the Contractor should create multiple day-trip records with appropriate days/dates and matching values for other trip-specific variables, split the total fishing hours (QT13) evenly among the those day-trips spent fishing, and correct the counts given for dock-to-dock trips and marine recreational fishing trips.

Other trips - This question asks the vessel representative to report the number of times that the vessel left its usual docking or launch site during the prior week for trips other than those counted in Q4. This answer should account for all other trips taken by the vessel, including non-fishing trips (trips for fuel, pleasure boating trips, whale-watching trips, etc.), commercial fishing trips, other trips (whale-watching, oil rig supply, etc.) and personal (captain and/or crew) recreational fishing trips in both freshwater and saltwater. The total number of "other" trips should be added to the reported number of "for-hire" trips (Q1) to get the total number of "dock-to-dock" trips. The total numbers of dock-to-dock trips, for-hire trips, and other trips reported for a given vessel should be entered in the record for each profiled trip by that vessel.

QT15 During the last week, did your boat make any additional trips? This would include any commercial or private fishing trips, as well as any non-fishing trips for fuel, bait or other activities?

For each "other" trip reported in response to QT15, the interviewer should ask the respondent to report the day on which the trip occurred. A separate record designating date, mode ("9"), and the number of the trip for that day (more than one may occur on the same day) should be created for each of these trips in the final database.

Each current operator of a vessel must be interviewed separately about vessel fishing trips and number of anglers who fished on each trip in the last week. There are exceptions to this rule. If the initial respondent indicates that he/she was the sole operator of the vessel for the prior week, then it may not be necessary to contact other potential operators of that vessel that week.

The interview is completed by asking questions about the postcard notification and the best times to contact the respondent if the boat is drawn again for sampling, and then thanking the respondent.

In various states and regions there are existing reporting requirements such as logbooks for specified vessels, such as the South Carolina mandatory logbook program. At the end of an interview, a sentence reminding vessel contacts of their other reporting responsibilities will be read. This sentence may vary by state and region.

QT16 Did you receive notification from us that you would be contacted for this interview?

QT17 In case the {boat name} is selected again for this survey, at what time of day would you prefer to be called?

I would like to thank you for participating in our survey and please have a nice day.

No flex questions are planned for this survey although we reserve the right to make changes necessary to provide data for management or to improve the clarity and flow of the questionnaire. Any changes would be developed cooperatively with the Telephone Contractor and final changes would be submitted at least a month before a wave began.

6.5. CHBTS Add-On Instructions

During the screening portion of the base CHBTS, it will be necessary to determine whether or not the point of contact for the base CHBTS is able to answer questions regarding the financial operation of the vessel. This is important for both the annual and trips level economic add-ons. If this respondent is unable to provide this information, the contractor will be responsible for obtaining the contact information from the party most able to answer financial questions. As a result, the CHBTS add-on will be directed at these two types of respondents; type (1) contacts that can answer financial questions in addition to the base CHBTS, and alternate contacts, type (2), that are contacted because the original base CHBTS contact cannot answer financial questions. For those with two contacts per vessel, the sample size would be increased to reflect the additional calls to the other vessel contact person.

Annual Survey

Appendix H contains the current version of the annual survey instrument that is planned for use on the Pacific coast beginning in 2001. The text below briefly describes the one-time survey of for-hire operators regarding the volume and types of activities engaged in during the year, as well as annual economic revenues, costs and employment. This form is preliminary and is subject to change based on results from the current effort on the West Coast.

In Q1, the interviewer will ask the interviewee to verify the vessel name and owner.

Q2.1-Q2.5, pertaining to characteristics of the firm, will allow analysts to better understand the firm and consequently model its behavior. An important element of this section is the questions identifying other vessels owned by the same person or entity. Determining whether costs are shared across vessels or attributable only to a single vessel is important in developing a financial picture of the firm. For multi-vessel firms, Q2.3a-Q2.3e provide information on the number of vessels in the firm and Q2.3f-Q2.3m provide information on annual firm costs. Q2.4a-Q2.4h provide comparable cost information for single-vessel firms. Q2.2 and Q3h-Q3k are useful for estimating the value of the firm's assets.

Q3a-Q3g regarding vessel characteristics will be used to identify factors that affect costs. For instance, horsepower, type of fuel and cruising speed will have a bearing on fuel costs; year built will have a bearing on maintenance costs. It should be noted that the interviewee will have prior information on some vessel characteristics (vessel length, tonnage, horsepower and passenger capacity) from each respondent's registration/license file and will ask the respondent to confirm that information. The frequency of discrepancies between interviewee responses and registration/license records may be useful for flagging potential problems in the registration/license files.

Some for-hire vessels conduct operations in more than one port. Q4.1 will be used to designate a principal port for each boat. Q4.2-Q4.3 pertaining to annual costs and revenues will be used in conjunction with Q2.3 and Q2.4 to evaluate annual financial performance. Q4.4 will be used to determine employment impacts associated with charter boat activity.

Trip Add-on

Appendix I contains the current version of the trip level survey instrument that is planned for use on the Pacific coast beginning in 2001. This form is preliminary and is subject to change based on results from the current effort on the West Coast.

This survey will be conducted as an add-on to the CHBTS and focuses on trip level information as opposed to annual data. The economic add-on to the MRFSS will be collected weekly over the course of one full year to ensure that the range and seasonality of for-hire vessel activity is captured in the economic survey. As mentioned above, two types of respondents are possible for this survey; type (1) respondents to the base CHBTS that can answer financial questions and type (2) contacts that are alternate financial data contacts. The potential exists for the type (2) contact to respond without the type (1) primary effort contact ever responding. In this case, no trip level effort data will be available to link with the trip level economic data. Because trip effort information is vital to the use of the economic data, these type (2) contacts will also need to be asked some basic trip information. As a result, we have two different forms for these two types of respondents. Version 1 should be administered to type (1) contacts and those type (2) contacts whose firm has already completed the base CHBTS. For type (1) contacts, the economic questionnaire should immediately follow the base CHBTS questionnaire. Version 2 is strictly for type (2) contacts whose firm has not supplied any base CHBTS effort information.

Item-by-item instructions are included in the forms presented in the appendices.

7. Interviewer and Supervision Requirements

7.1. Interviewers.

The Contractor shall be solely responsible for locating, hiring, training and supervising persons to serve as interviewers for the RDD and the CHBT surveys.

7.1.1. Interviewer Qualifications

All calls shall be made by experienced telephone interviewers, trained and supervised by the Contractor. Because the telephone household survey is conducted during six discrete dialing periods throughout the year, this approach may require a large pool of part-time interviewers. Interviewers must have strong communications skills and be able to interact with people in a friendly and professional manner. Experience in telephone interviewing is desirable to effectively deal with a variety of situations while conducting the interview, and thus is required.

The telephone contractor should consider using a smaller core set of interviewers to conduct the CHBTS, and have the same interviewer responsible for a certain set of captains for a wave or even across waves. Some vessel operators will be called repeatedly throughout the year and perhaps even for a wave, depending upon the size of the fleet in a particular state. This repeated calling may result in increased resistance to being interviewed if interviews are thought to be formal and impersonal. Having the same interviewer conduct repeated contacts with an individual should help establish a rapport with respondents and familiarity with those captain's operations may help the interviews flow more smoothly and take less time.

In certain areas of the United States, a language barrier may exist. Therefore, some specially qualified interviewers may be needed to interview non-English speaking households and anglers. The Spanish translation of the RDD questionnaire shall be part of the CATI system. The current Spanish CATI version is available on the web site. At least one interviewer per shift must be bilingual (English-Spanish). All contacts requiring a Spanish-speaking interviewer must be referred to this interviewer, who would administer the questionnaire using a Spanish CATI version of the RDD questionnaire. It is unlikely that this situation would occur within the CHBTS and a Spanish CATI version of the CHBTS questionnaire is not required.

7.1.2. Interviewer Training

The Contractor(s) shall be responsible for providing interviewer training for the telephone data collection. Training programs shall be designed to ensure quality and consistency of interviewing methods, questionnaire use, coding method, and quality checks of data. The level of training and content of the training programs must be approved by the NMFS.

An extensive training session must be held for all personnel who have not previously worked on the survey. This training must cover general telephone interviewing procedures as well as procedures specific to the MRFSS, the CHBTS, and the Economic add-ons. Training sessions must include a general overview of the background, purpose and design of the MRFSS, the CHBTS, and the Economic add-ons, and the uses of the data collected. The introduction shall be sufficient to allow interviewers to respond to general questions regarding the MRFSS, the CHBTS, and the Economic add-ons. Questions and discussion should be encouraged to ensure that all interviewers understand the importance and overall purpose of the surveys. Interviewers should be briefed on the existence of other programs in various states and regions that monitor charter and head boats, such as the South Carolina mandatory logbook program. NMFS will provide a list of other reporting requirements for the areas covered by the CHBTS. The overview must be followed by an item-by-item explanation of the data collection instruments and a review of all materials used to conduct the interviews. Subjects addressed in the telephone survey training sessions must include, but not necessarily be limited to:

- 1. An introduction to the objectives, goals, design, and operation of the RDD Survey, and addressing
 - a. Random digit telephone number generation,
 - b. Eligibility of households, anglers and trips,
 - c. Definitions,
 - d. Assuring confidentiality of responses,
 - e. Awareness of county quota systems and tolerances, and
- 2. An introduction to the objectives, goals, design, and operation of the CHBTS Survey, and addressing
 - a. Method and importance of systematic random sampling of the "charter" and "head" boat strata for weekly interviews,
 - b. Eligibility of vessels and vessel operator respondents,
 - c. Recording respondents level of cooperation,
 - Definitions.
 - e. Assuring confidentiality of responses,
 - f. Awareness of 10% Awareness of weekly sampling quotas and tolerances, and
 - g. Call-backs to validate 10% of the interviews.
- 3. Proper procedures for conducting an interview, including
 - a. Recording call attempts and completions,
 - b. Screening respondents for eligibility,
 - c. Setting appointments and making callbacks,
 - d. Overcoming respondent resistance and discouraging refusals,
 - e. Recording answers correctly into the Computer Assisted Telephone Interviewing (CATI) System data base,
 - f. Proper probing to clarify imprecise or confusing responses,
 - g. Reading the questionnaire verbatim, in a manner that respondents can easily understand
 - Obtaining complete verbatim answers,
- 4. Detailed descriptions of variables such as fishing mode, fishing area, private versus public access, and target species;
- 5. Use of call-backs to verify high numbers of reported trips.

Each training session must contain periods of role playing to result in good interviewing technique. All trainees must conduct practice interviews with supervisors to allow first-hand criticism of their interviewing technique.

All interviewers, including those employed during previous waves, must receive a final briefing before the start of each wave's dialing period. This briefing will refresh techniques established in previous waves, review the basic details of the surveys, explain the exclusions in questionnaires that are applicable to that wave and point out any changes in forms. Interviewers shall be kept informed of developments in the recreational fisheries being surveyed, and shall be able to refer respondents to the MRFSS staff for further information. Questions would be strongly encouraged during these final briefings.

Interviewers will be provided with copies of the Privacy Act policy, the explanation why a charter or head boat vessel operator may be reporting to 2 systems, the URL for the MRFSS web site, and all other necessary documents and forms.

7.2. Supervision and Validation

Project supervisors must oversee the operation of the RDD and CHBTS surveys and the economic add-ons. These individuals must be experienced in telephone interviewing and be knowledgeable about the MRFSS, the CHBTS, the Economic add-ons, and awareness of the existence of the other charter and head boat monitoring programs. They must also have effective skills in managing and motivating personnel. Supervision shall include direct observation of interviewer procedures, silent monitoring of interviews where the supervisor can visibly match the data being entered with the answers of the respondents, taping of calls with comparison to entered data, and call-backs to validate interviews. Additional training or remedial action shall be taken whenever appropriate. Remote monitoring by NMFS personnel is a required capability.

7.2.1. RDD Silent Monitoring

Silent monitoring of each experienced interviewer shall be performed at a level to ensure that ten percent of all interviews by each experienced interviewer are independently verified for correct survey protocol and accurate recording of key survey information. The contractor should monitor new interviewers at a level higher than the 10% minimum. Generally, the supervisor should not interrupt the interview while in progress. Following the interview day or a specific interview, the supervisor should provide feedback to the interviewer and give suggestions to help improve interviewing techniques.

7.2.2. CHBTS Validation

All of the interviews completed by each new interviewer on the first day of work must be tracked to ensure that the interviewer is following procedures correctly and has good interviewing technique. Throughout the remainder of the survey, at least 10 percent of each interviewer's work must be validated by either 1) silent interview monitoring, 2) by recording of telephone calls for later comparison with entered data, or 3) by re-contacting respondents. This flexibility is provided due to the possible patchiness of the CHBTS caused by having recommended calling times for individual vessel contacts in the frame, i.e. sampling is not continuous as for the RDD survey. In addition, in the Gulf charter boat operators requested the 10% call-backs for validation as it gives them assurance that their information was recorded correctly, so this may be a desirable method on the Atlantic coast as well. Supervisors, or other interviewers, may conduct follow-up calls to validate information recorded by each interviewer from their weekly sample of interviews. The interviewer who conducted the initial interview should not be the same interviewer for callback validation. Interviews monitored in progress by supervisors may be counted toward the 10 percent validation requirement if responses are recorded independently for comparison with interviewer entry.

Silent interview monitoring must be carried out by supervisors. The supervisor would listen to an interview in progress and record the respondent's answers on a second questionnaire. At no time will the supervisor interrupt the interview while in progress. Following the interview, the two questionnaires would be compared and any discrepancies resolved. Significant inconsistencies would necessitate additional intensive checking and validation of work conducted by that interviewer. Supervisors should also give suggestions to help improve interviewing techniques.

Re-contacts of respondents should attempt to verify that: (1) the interview took place, and (2) responses were coded correctly. At a minimum, information on total dock-to-dock trips and total marine recreational fishing vessel trips, as well as the number of passengers, the number of anglers who fished, date, state, mode, and area of each trip recorded on the interview form must be confirmed during the re-contact to validate the coding of original responses. The questionnaire to be used for the post-interview validation calls is in Appendix J.

7.3. Remote Monitoring

The Telephone Contractor must provide the capability for MRFSS staff, or others designated by MRFSS staff, to perform silent monitoring of RDD and CHBTS interviewing and call-backs from a remote phone. If the CHBTS monitoring is through tapes, the contractor shall provide those tapes to MRFSS on request or provide the capability to listen to the tapes and view the data (may be hard copy or separate data file) from a remote phone.

7.4. Verification of outliers

The number of two month anglers contacted in the telephone household survey can be relatively small in several states and waves. Unusually large reported numbers of trips, given these small sample sizes, can result in unrealistic expanded estimates of trips, and then catch. In these cases, it is appropriate to verify the numbers through call-backs.

The NMFS will generate distributions of pooled data for trips per household and angler from the previous four years for each state, mode and wave. Observations that are outside of the 95th percentile are considered outliers. The NMFS will provide outlier distributions to the telephone contractor at least 30 days prior to each wave.

RDD respondent households and anglers who report an abnormally high number of trips (greater than the 95th percentile for each wave, state and mode calculated from the five most recent years of data, exclusive of the current year) must be re-contacted for verification. At least 5 attempts to re-contact those respondents must be made before delivery of final data. Re-contacts of respondents should attempt to verify that: (1) the interview took place, and (2) responses were coded correctly. At a minimum, information on the total number of trips, and the date, mode, area and gear from the most recent trip recorded on the interview form must be collected during the re-contact to validate the coding of original responses. Validation results shall be reported in administrative wave reports and administrative data bases.

8. Data Bases, Editing Procedures, and Data Delivery

8.1. Data Entry

The Contractor shall use a CATI system for data entry during all RDD, CHBTS, and Economic Add-on interviewing. The Contractor may propose other forms of automation to replace or supplement CATI, or to improve support activities.

8.2. Record Formats

The data formats, units of measure, and coding used for the telephone survey data bases shall be provided by NMFS and shall be the same for all Regions.

8.2.1. RDD Telephone Interview Data Bases

Telephone interview data sets contain data for households with eligible marine recreational fishermen. Except for economic add-ons, non-fishing household screening interviews (no 2-month marine recreational fishermen) are not key entered.

The telephone interview data are stored in a three record hierarchical format with records linked by a unique identifier for each household, called CODENUM. CODENUM is a unique number for each household dialed during a wave and includes year, wave, subregion, state, county and unique household code number. The household code number should be unique for each household within a wave. There are also unique fisherman codes within each household (sequential within each household) that link trip records back to an individual fisherman. The telephone interview data also include the RDD economic add-ons in record type 8. For these data there may be type 1 or 2 records for non-fishing households and household economic variables in record type 8.

The four record types in the fishing household telephone interview files are:

- 1. household information one record per household. These contain the CODENUM identifying information on the household such as state and county of residence; number of anglers who went fishing in the last 12 months and the last 2 months; number of interviewed anglers; number who refused to be interviewed; number who were unavailable; the number otherwise not interviewed due to language barriers, age, death, etc.; and the number of anglers with proxy data.
- 2. angler information multiple anglers per household result in multiple type 2 records. These contain the CODENUM, an id number for each angler within a household, whether the information was provided by the angler or by someone else, language, whether the angler could recall all trips in the 2-month period, and the total number of trips taken by the angler.
- 3. fishing trip information multiple trips per angler result in multiple type 3 records for each angler. These contain CODENUM, the angler id code, a consecutive number for each trip taken by the angler, date of the trip, fishing mode, area fished, boat access site characteristics, and state and county where the trip occurred.

4. economic add-on - These data contain CODENUM, the angler id code, county of residence, region of residence, state of residence, wave, year, boat ownership, number of trips in last 2 months, number of trips in last 12 months, age, gender, ethnicity, education, employment status, household income, and years of saltwater angling experience, and saltwater fishing skill-level. We may also ask category (4) anglers a few trip specific questions for their most recent trip such as species target, overnight trip status, income foregone, contingent valuation questions, behavior and attitude questions, and trip and annual expenditures on saltwater angling.

Naming conventions are:	Record Type	File Name
· ·	1	t1_YYYYW.ssd01
	2	t2_YYYYW.ssd01
	3	t3_YYYYW.ssd01
	8	t8 YYYYW.ssd01

where YYYY = year, W = wave, and .ssd01 is the SAS data set extension.

Appendix K lists the variable names, formats, and codes for each record type.

8.2.2. RDD Non-Fishing Household Data Bases

Non-fishing household files are summaries of telephone interview data for all households contacted. They contain the number of sampled fishing and non-fishing households for each sampled county by state and wave. There is one record per county. The MRFSS project team uses these files in the effort estimation procedure and for calculating prevalence rates (% of households that fish). The sampling procedure weights counties by the square root of the county population to ensure that rural, less populated areas have at least some representation. Therefore, when the raw data are used to calculate prevalence rates or other statistics they should be re-weighted using census data on the total number of households in the county, or rural county activity levels will be given too much weight.

Naming conventions are nfYYYYW.ssd01 where YYYY = year and W = wave. Appendix L shows the variables names, formats, and codes.

8.2.3. CHBTS Directory

Appendix M contains variable names, formats, and codes for the Charter and Head Boat Directory. At the end of each wave, the Telephone Contractor should add variables for the total number of contacts with each vessel during a wave. The Directory should be updated with data collected during dialing concerning eligibility, new contacts, and financial contacts, if different. This updated directory will be provided to the Intercept Contractor to

aid in their maintenance work and in person-to-person outreach to work with uncooperative contacts when possible.

8.2.4. CHBTS Interview Data Bases

CHBTS telephone interview data are to be stored in a specified format such that multiple records for each vessel and vessel operator can be linked by unique survey-specific identifiers. The vessel identifiers are specific to a particular combination of vessel name and vessel number (State or U. S. Coast Guard registration number). Each vessel has been assigned a unique survey-specific, 7-digit identification number. The first two digits are based on the state FIPS codes. The remaining 5 digits were randomly assigned.

Appendix N shows the variables names, formats, and codes for the CHBTS Interview data bases and includes the base effort data as well as the 2 record types for the trip add-ons.

The variables, names, formats, and codes for the CHBTS Economic Annual Survey are being developed for the Pacific Coast and will be provided to the successful contractor at least 30 days prior to the first dialing period. Probable variables and many of the codes can be determined by looking at the actual questionnaires.

8.2.5. CHBTS Dialing Results Data Bases

The dialing results data base contains the outcome of each dialing attempt for each vessel selected in a week. Weekly data should be compiled into one data base for the wave for all areas combined. Appendix O shows the variables names, formats, and codes.

8.3. Data Edits

The Telephone Survey Contractor shall be responsible for data editing and delivering error-free data on the initial delivery date. Error-free data is defined as data that passes through NMFS quality assurance program with no errors detected. The NMFS telephone data quality assurance programs will be provided to the contractors and an example listing is in Appendix P.

Quality control processes for ensuring accurate data entry and editing the data must be approved by NMFS prior to their implementation. Copies of the editing programs used in the 2000 survey shall be provided to the successful data collection Contractor, but shall not be assumed to be complete or accurate for purposes of this solicitation. New error checks continue to be developed by NMFS and suggestions from the Contractor are encouraged.

Error checking should be accomplished through either the use of table look-ups while CATI data entry is underway or by running editing routines on the data set after data entry is completed for the wave, before delivery of preliminary data to NMFS. All codes should be controlled by the CATI system to the extent possible such that only valid documented code values are used in the data bases. All checks described in Section 8.3. must be incorporated into machine edits. Every data element must be checked for data entry errors, reasonableness in falling within an acceptable range, use of valid codes, and logic in relation to other data elements. Examples of editing checks for the telephone household survey data include but are not limited to the following:

- editing for duplicate identification codes,
- state and county of residence,
- state and county of fishing trip,
- reasonableness of the trip information for fishing (i.e., number of trips by mode of fishing by state and subregion),
- number of people fishing during the previous 12 months and 2 months, etc.

The historical MRFSS data base from the telephone household surveys also may be used by the successful Contractor for constructing criteria and performing outlier analyses.

Questionable records identified by the error-checking program must be examined by the Contractor. This may mean a call-back to the household or angler or checking with the interviewer. Possible errors may also be found during the wave review meetings and those data must be examined by the Contractor.

Those records questioned, and corrected or verified, should be reported to NMFS on spreadsheets listing the key information to identify the record (state, wave, codenum, angler id, etc.) and the value questioned, the resolved or corrected value, and the reason for the correction. If outlier analysis is used to question the recorded responses the outlier (limit) values should be included on the spreadsheet.

If errors are found after the meetings for the wave error checking process, the Contractor shall be responsible for correcting the data within one month of the end of the wave, if the error was allowed or caused by the Contractor.

8.3.1. RDD Edits

Item-by-item instructions for interviewer and supervisor editing apply to the 2001 telephone household survey screening and interview questionnaires (Appendix F).

Cross-Reference Number of People in the Household with Numbers of Fishermen in the Household: This number of people in the household (Q4) must be equal to or larger than the total fishermen in the household (Q1), 12-month (Q) and 2-month fishermen (Q). If the number of people in the household is less than the number of fishermen in the household, this indicates that the respondent may be including friends or other people who fish together as household fishermen when they are actually not household members. The number of anglers in the household who went marine recreational finfishing in the past 12 months may be equal or less than the total number of people/anglers in the household. The 2-month fishermen must be less than or equal to the 12 month fishing response.

<u>Two-Month Trips</u> -. This number should match the total number of trips profiled (or remembered even if all details were not remembered).

<u>Date of Trip</u> - The dates of the fishing trips for an individual angler must be in reverse chronological order. Only dates within the floating wave period prior to the interview date or "00" for day are valid.

Details for all additional required checks are contained in Appendix P.

8.3.2. CHBTS Edits

Details for all currently required checks are contained in Appendix Q. These checking programs will continue to evolve as we gain experience in conducting the CHBTS

8.4. Data Delivery

RDD interviews, non-fishing household, CHBTS interviews, CHBTS directories by wave, CHBTS dialing results, and economic add-on data bases shall be maintained on magnetic media. These data shall be delivered to NMFS through computer networks or on magnetic tape or diskette following the delivery schedule in Section F. All magnetic files will be in a format that allows manipulation and analysis (ASCII, data base, SAS, spreadsheet, but not word processing files). All magnetic computer files shall be fully documented in the wave reports when changes are made. The final annual reports will contain all versions of the documentation.

Documentation shall include, but not necessarily be limited to the following:

a. Characteristics of the files (e.g., record formatting characteristics; number of records in each file; data format);

 A description of file content including the project name; year and wave of data; date generated; person to be contacted; and other pertinent descriptive information.

9. Survey Reporting Requirements

For the RDD, CHBTS and economic add-ons, the Contractor shall prepare and submit wave and annual reports of survey activities and results. These reports are to be provided to NMFS on a bimonthly and annual basis as required in Section F, Deliveries or Performance. Timely submission of these performance data is necessary to maintain data collection quality through identification of problem areas and adjustment of procedures as necessary. These data are also useful for tracking trends in dialing success and for contractors interested in developing proposals for the conduct of the telephone surveys.

Also of critical importance to quality control is regular reporting on interview validation results. Results of all supervisory activities described in Section 7.2. must be fully documented. These include observations of in-progress interviews by interviewers, follow-up counseling after in-progress monitoring that identifies problem areas and improves interview technique, and counseling on problem areas following callback verification.

9.1. Wave Reports

One report is required for each wave that summarizes dialing results and key data for the RDD, CHBTS, Economic Add-ons, and any flexible questions. Three bound (or notebook) hard copies of each wave report are required. In addition to the hard copies, an electronic file(s) of the wave reports will also be delivered to NMFS on magnetic media. In addition to the hard copies and electronic report files, certain data (primarily dialing results) will be required in a data base format (MS-Access, SAS, spreadsheet) that allows manipulation of the data at the county level, as specified in Sections 9.1.1. and 9.1.2.

9.1.1. RDD Wave Report Tables

Examples of the current tables in the wave report for the RDD survey are included in Appendix R and the world wide web at

http://www.st.nmfs.gov/st1/procurement/mrfss_survey.html . For the RDD survey, the wave reports shall include, but not necessarily be limited to, the following:

- 1. Overview (Report 1 in Appendix R)
- 2. By state, subregion, and nation (Report 2 in Appendix R) (* Note that for the Pacific coast states, these are reported by state and county):
 - a. Total Household Quotas,
 - b. Total households contacted,
 - c. Total households contacted (number and proportion of total contacted) that reported fishing in the last 12 months,
 - d. Total households contacted (number and proportion of total contacted) that reported fishing in the last 2 months,
 - e. Average trips per 2-month fishing household,
- 3. By state, subregion, and nation (Report 3 in Appendix R), total number and percent of eligible fishing households by interview status;
 - a. Final Eligible Households
 - 1. Total Number of 2-month Fishing Households (after all data finalized)
 - 2. Number of eligible households with 1 or more complete interviews,
 - 3. Number of eligible households with 1 or more incomplete interviews due to refusals.
 - 4. Number of eligible households with 1 or more proxy interviews (language barrier, child, deafness),
 - 5. Number of eligible households with 1 or more proxy interviews due to unavailability of angler throughout dialing period or all fishermen in household took all trips together,
 - 6. Number of households with initial contact indicating eligibility but no fishermen interviewed
 - b. Initial Eligible Households
 - 1. Number of households where initial screening indicates eligible fishing activity;
 - 2. Number of households that turn out to be not eligible upon interviewing of fishing respondent (fresh water, not in last 2 months, charter captain or crew member, etc.)
- 4. By state, subregion, and nation (Report 4 in Appendix R), average number and percent of trips per angler by mode;
 - a. Total number of eligible anglers,
 - b. Number and percent of anglers that refused trip profiling
 - c. Number and percent of total trips by mode for
 - 1. Shore
 - 2. Party boat
 - Charter boat
 - 4. Part and Charter boat (sum of 2 & 3)
 - 5. Private/Rental boat
 - 6. Boat but unknown type

- 5. By state, subregion, and nation (Report 5 in Appendix R *please note that title and labels are incorrect with regard to private versus public), distribution of boat trips by public versus private access and launch type;
 - a. Public access
 - 1. Launch ramp
 - 2. Boat slip
 - 3. Moored from dock
 - 4. Other
 - b. Private
 - 1. Personal residence or dock
 - 2. Private locked gate marina
 - 3. Private property
 - 4. Unlocked marina
 - 5. Other
 - c. Don't know
- 6. By state, subregion, and nation, and mode (Report 6 in Appendix R) distribution of times fishing trips ended in numbers and percent of trips (*please note that the current wave tables do not report this by mode but the 2002 requirements do require this separately);
 - a. Times are grouped into either 3 hour blocks (Midnight-3, 3-6 AM, 6-9 AM, 9-12 AM, Noon-3 PM, 3-6 PM, 6-9 PM, 9 PM-Midnight) or "Depends on Tides" or . Multi-day trips, or don't know/refused.
- 7. By state, subregion, and nation, (Report 7 in Appendix R), the number and percent of trips and anglers with out-of-state and in-state trips;
 - a. Total Number of trips
 - b. Number and percent of out-of-state trips
 - c. Number and percent of in-state trips
 - d. Number and percent of anglers profiled with and without detailed trip data
 - e. Number and percent of anglers with out-of-state trips
 - f. Number and percent of anglers with in-state trips
 - g. Average total trips per angler
 - h. Average out-of-state trips per angler
 - i. Average in-state trips per angler.
- 8. By state, subregion, and nation number of households with proxy data (Report 8 in Appendix R);
- 9. By state, subregion, and nation, fishing activity results for all contacted households (Report 9 in Appendix R)
 - a. Total number and percent of households contacted,
 - b. Total number and percent of households who refused the initial 12-month screening question,

- c. Total number and percent of households who had no fishing in the last 12 months,
- d. Total number and percent of households who could not answer the initial 2-month screening question,
- e. Total number and percent of households who refused the initial 2-month screening question,
- f. Total number and percent of households who had no fishing in the last 2 months,
- g. Total number and percent of households who initially indicated fishing eligibility but were later found to be ineligible, and
- h. Total number and percent of households with eligible fishing in the last 2 months.
- 10. By state, subregion, and nation, interview results for all identified fishermen (Report 10 in Appendix R)
 - a. Total number of anglers identified,
 - b. Total number of anglers personally interviewed,
 - c. Total number of anglers with proxy interviews because they were never available (*please note that this is a new category which breaks apart the category labeled proxy anglers which included c. & d.),,
 - d. Total number of anglers with proxy interviews because all anglers in the household all made the same trips (*please note that this is a new category which breaks apart the category labeled proxy anglers which included c. & d.),
 - e. Total number of anglers with proxy interviews because they were children, or spoke a language other than English or Spanish (or Hawaiian required languages for Hawaii dialing), or deafness
 - f. Total number of anglers who refused to provide detailed trip information, and
 - g. Total number of anglers with no proxy interviews never available and no one able to reasonably answer for them.
- 11. By state, subregion, and nation, final resolution of all numbers in the sample (in numbers and percentages) (Report 11 in Appendix R):
 - a. Non-Response
 - 1. number of telephone numbers with undetermined status due to busy lines,
 - 2. number of telephone numbers with undetermined status due to no answer.
 - 3. Number of telephone numbers with undetermined status where noone was ever available for screening (mid-terminates/breakoffs; unable to be interviewed due to age, disability, etc.; no eligible respondent in fielding period; scheduled callbacks; unscheduled callbacks; dialer dispositions for records that resolved their last

- attempt without going to an interviewer),
- 4. number of telephone numbers with undetermined status due to answering machines or answering service,
- b. Contacted Non-Respondents
 - 1. Number of telephone numbers with undetermined status due to communication problems such as deaf, foreign language;
 - 2. Number of telephone numbers with undetermined status due to don't know or refusal;
- c. Ineligible Response
 - 1. Number failed pre-screening (household previously called on different number),
 - 2. Number not in service, disconnected number/dead line,
 - 3. Number is non-household (Business/coin phone/time/weather/computer tone) or is institutional housing (dormitory/barracks/nursing home),
 - 4. Wrong number,
 - 5. Wrong county,
 - 6. Not permanent resident (part-year housing)
- d. Eligible Non-Fishing Households
 - 1. Number of households with no people who fished in the previous 12 months.
 - 2. Number of households with people who did not fish in the previous 2 months but did fish in the previous 12 months,
 - 3. Number of households with people who, on first contact, indicated two-month fishing activity, but on later contact were found to have no eligible two-month fishing activity,
- e. Eligible Fishing Households
- 12. Resolved Telephone Numbers by day of the 2-week dialing period (Report 12 in Appendix R);
- 13. By subregion, region, and nation, the responses to various screening questions based on the gender of the first household respondent (Report 14 in Appendix R) (*please note the new requirement for reporting these numbers to the subregion level);
 - a. Response by gender (number and percent) to "Does anyone in the household go fishing?"
 - b. Response by gender (number and percent) to "Has anyone in the household been saltwater sport fishing in the last 12 months?"
 - c. Response by gender (number and percent) to "Has anyone in the household been saltwater sport fishing in the last 2 months?"
 - d. Existence of type 1 records (eligible fishing household) by gender (number and percent).

- 14. By state, subregion, region, and nation, productivity data in terms of telephone interviewing time (please note that this is a NEW requirement);
 - a. Average minutes per interview for the total RDD sample,
 - 1. Average minutes per non-fishing household,
 - 2. Average minutes per fishing household (with flexible questions when added),
 - b. Average minutes per RDD economic add-on (when ordered),
 - c. Average minutes per CHBTS interview, and
 - d. Average minutes per CHBTS economic add-on (when ordered);
- 15. By subregion, region, and nation, overview of results, basic summary of economic add-on variables (distributions of responses to all variables or a subset of variables specified by the NMFS economist),
- 16. Validation results By interviewer (code): Total number of calls validated, and total number and percent of errors detected and corrected.
- 17. By subregion, region, and nation, overview of results of any of the flexible questions that may be exercised (to be determined mutually); and
- 18. Recommendations and proposals for changes to address problems in the conduct of the telephone survey.

In addition to tabulation in the wave reports, the survey results activity data from Items 2-3, 9-11, 12, and 13 will be maintained and delivered to NMFS on magnetic media in a form (spreadsheets or other type of data base) that would allow manipulations to be made at the county level.

9.1.2. CHBTS Wave Report Tables

Examples of the current tables in the wave report for the CHBTS survey are included in Appendix S. For the CHBTS survey, the wave reports shall include, but not necessarily be limited to, the following:

- Overview
- 2. By week and state, subregion, and nation (Table 28 in Appendix S):
 - a. Total vessel quotas,
 - b. Respondents
 - 1. Numbers and percent of active eligibles
 - 2. Numbers and percent of inactive eligibles
 - 3. Numbers and percent of ineligibles
 - 4. Numbers and percent of refusals
 - c. Non-respondents
 - 1. Numbers and percent due to language barrier
 - 2. Numbers and percent due to inability to contact

- 3. Average number of attempts to contact non-respondents
- 4. Numbers and percent with no contact possible (directory contains number but number disconnected, wrong number, etc)
- 3. By state, subregion, and nation (Table 29 in Appendix S), charter boat directory summary:
 - a. Number of vessels on the frame
 - b. Number of uncooperative vessels on the frame
 - c. Number of vessels on the frame with complete enough data for sampling purposes (good list)
 - d. Number of vessels on the frame with incomplete data for sampling purposes (bad list)
 - e. Number of vessels on the frame that are covered by the Southeast Head Boat Survey (NMFS-run survey that we do not overlap with)
 - f. Number of vessels on the frame that are inactive (directory indicates that vessel operator indicated no plans to be active the entire wave)
 - g. Number of vessels on the frame that are ineligible (no longer operating as a for-hire vessel, freshwater)
 - h. Missing items that placed vessels on bad list
 - 1. Vessel id (Vessel id flag)
 - 2. Inactive (Activity flag)
 - 3. State flag (don't know what state the vessel is operating becomes rare after the survey is operational for a few months)
 - 4. No phone number (Fon_flag)
 - 5. Business/port county (Ncst_flg county of operation missing or non-coastal)
- 4. By state, subregion, and nation (Table 30 in Appendix S, distribution of interview variables:
 - a. Status codes by Dialing results,
 - b. Status codes by number of recreational fishing trips,
 - c. Recreational fishing trips by sample week,
 - d. Boat trips (all trips, not just recreational fishing) by charter and head boats
 - e. Vessels notified by form prior to dialing
 - f. Attempts by result
 - g. People per trip by sample week
 - h. Hours fished per trip by sample week,
 - i. Fishing mode by sample week
 - i. People per trip by mode
 - k. Area fished by sample week
 - I. People per trip by area fished
 - m. Day of the trip by sample week
 - n. County of trips by sample week

- o. Trip origin site by sample week
- p. State of access by sample week
- q. Number of trips per day by sample week
- r. Primary Fishing method by sample week
- s. Primary fishing method cross-tabulated by secondary fishing method
- t. Multi-day trips
- u. Summary data on angler trips by mode and state,
- v. Charter boat trips by primary fishing area
- w. Headboat trips by primary fishing area
- x. Charter boat trips by day of the week
- y. Head boat trips by day of the week
- z. Trips by county and mode
- aa. Listing of incomplete data records
- 5. 10% silent monitoring results; including
 - a. Number of calls monitored by state and wave
 - b. Number and percent of errors found by error type (coded wrong answer, misunderstood respondent)
- 6. By subregion, region, and nation, overview of results of any of the flexible questions that may be exercised (to be determined mutually); and
- 7. Recommendations and proposals for changes to address problems in the conduct of the telephone survey.

In addition to tabulation in the wave reports, the survey results activity data from Items 2-3, 4a-b, and 4e-f will be maintained and delivered to NMFS on magnetic media in a form (spreadsheets or other type of data base) that would allow manipulations to be made at the state and wave level.

9.2. Annual Report and Other Deliverables

An annual report is required for each year of the contract that provides an overview of the data collection procedures and results for the RDD, CHBTS, Economic Add-ons, and any flexible questions. Three bound (or notebook) hard copies are required. In addition to the hard copies, an electronic file(s) of the annual report will also be delivered to NMFS on magnetic media. The report will contain:

- 1. Yearly summary of the tables provided in the wave reports,
- 2. Description of data collection procedures and results, including description of any changes throughout the sampling year,
- 3. Description of the coding and editing procedures,
- 4. Description of other quality control measures and procedures, such as silent monitoring and call-backs, Listings of the RDD, CHBTS, Economic Add-on and

Flex question edit checking programs, and

5. Listing of all CHBTS sample draw programs.

Other required deliverables:

- 1. Electronic executables of all CATI versions of all questionnaires, including flex questions,
- 2. Electronic working copies of all data editing and quality control programs, and sample draw programs,
- 3. Hard copies and electronic files of all manuals, forms, and training presentations used in each year of the survey, including any revisions,
- 4. Any other specially-designed software developed for tracking of assignments, quota monitoring, etc; however, if widely available commercial software is used, only examples of that use would be required For example, if resolution of possible errors is done on a commercial spreadsheet there is no need to provide those spreadsheets, only examples.

If a web application is designed for tracking call-backs to verify numbers of trips, that application would need to be provided as an electronic file.

All deliverables are the property of the government and may be passed on to other contractors during future procurement actions.

TABLES

Table 1. Approximate Telephone Household Interview Quotas by State and Wave.

STATE			WA	VE			Annual
	1	2	3	4	5	6	Total
Southern California	2,453	3,130	4,804	4,800	3,355	2,246	20,788
Northern California	3,069	3,199	4,237	6,281	3,543	3,971	24,300
Humboldt/Del Norte	686	715	947	1,404	792	888	5,432
Oregon	1,080	849	2,712	4,630	3,572	860	13,703
Washington	754	775	2,654	4,538	2,454	1,392	12,567
Pacific Coast	8,042	8,668	15,354	21,653	13,716	9,357	76,790
Connecticut	0	340	1,564	1,738	1,200	434	5,276
Maine	0	0	1,718	2,504	1,171	0	5,393
Massachusetts	0	902	3,378	5,402	2,651	495	12,828
New Hampshire	0	0	1,190	1,493	720	0	3,403
Rhode Island	0	324	967	1,737	1,124	506	4,658
North Atlantic Subregion	0	1,566	8,817	12,874	6,866	1,435	31,558
Delaware	0	330	991	1,323	855	410	3,909
Maryland	0	858	2,911	3,757	2,785	1,064	11,375
New Jersey	0	1,142	4,621	7,085	4,501	1,707	19,056
New York	0	785	3,339	5,609	2,985		13,845
Virginia	0	989	3,393	4,037	2,219	1,543	12,181
Mid-Atlantic Subregion	0	4,104	15,255	21,811	13,345	5,851	60,366
Northeast Region	0	5,670	24,072	34,685	20,211	7,286	91,924
Georgia	0	513	706	686	608	441	2,954
North Carolina	0	1,412	3,916	4,922	3,443	1,780	15,473
South Carolina	0	683	1,505	1,609	1,046	764	5,607
South Atlantic Subregion	0	2,608	6,127	7,217	5,097	2,985	24,034
Alabama	536	678	1,108	1,099	815	530	4,766
East Florida	5,096	5,410	6,773	6,751	5,172	4,610	33,812
West Florida	5,988	7,900	9,288	8,835	5,776	5,515	43,302
Louisiana	1,566	1,706	2,427	2,715	1,977	1,758	12,149
Mississippi	421	617	1,050		817	510	4,299
Gulf of Mexico Subregion	13,607	16,311	20,646	20,284	14,557	12,923	98,328
Puerto Rico	2,000	2,000	2,000	2,000	2,000	2,000	12,000
U.S. Virgin Islands ^a	900	900	900	900	900	900	5,400
U.S. Caribbean Subregion	2,900	2,900	2,900	2,900	2,900	2,900	17,400
Southeast Region	16,507	21,819	29,673	30,401	22,554	18,808	139,762
Atlantic and Gulf Coast	24,549	36,157	69,099	86,739	56,481	35,451	308,476
Hawaii	2,400	2,200	2,200	2,200	2,200	2,200	13,400
West Pacific Subregion	2,400	2,200	2,200	2,200	2,200	2,200	13,400
Total	26,949	38,357	71,299	88,939	58,681	37,651	321,876

^aU.S. Virgin Islands were not sampled in 2001 but were sampled at the rate shown in 2000 and are expected to be sampled at that rate in 2002.

Table 2. Approximate Telephone Household Interview Quotas By State, County and Wave

							WA	/E			ANNUAL
	STATE		COUNTY SUBREG		1	2	3	4	5	6	TOTAL
6	California	37	Los Angeles	1	726	925	1422	1420	992	665	6,150
6	California	59	Orange	1	390	498	764	763	534	357	3,306
6	California	65	Riverside	1	286	366	561	561	392	262	2,428
6	California	71	San Bernardino	1	296	377	579	579	404	271	2,506
6	California	73	San Diego	1	404	516	792	791	553	370	3,426
6	California	83	Santa Barbara	1	154	196	300	300	210	140	1,300
6	California	111	Ventura	1	197	252	386	386	270	181	1,672
	SOUTHERN CALIF				2,453	3,130	4,804	4,800	3,355	2,246	20,788
6	California	1	Alameda	2	315	329	436	646	364	408	2,498
6	California	13	Contra Costa	2	253	264	350	519	293	328	2,007
6	California	15	Del Norte	2	170	177	234	347	196	220	1,344
6	California	23	Humboldt	2	390	407	539	800	451	506	3,093
6	California	41	Marin	2	137	143	189	281	158	177	1,085
6	California	45	Mendocino	2	81	83	110	163	93	103	633
6	California	53	Monterey	2	155	162	215	318	179	201	1,230
6	California	55	Napa	2	94	98	130	193	109	122	746
6	California	67	Sacramento	2	290	302	400	593	334	375	2,294
6	California	69	San Benito	2	53	56	73	108	63	68	421
6	California	75	San Francisco	2	251	262	347	515	290	325	1,990
6	California	77	San Joaquin	2	183	191	253	375	211	237	1,450
6	California	79	San Luis Obispo	2	131	137	181	268	151	170	1,038
6	California	81	San Mateo	2	224	233	309	458	258	290	1,772
6	California	85	Santa Clara	2	332	346	458	678	383	430	2,627
6	California	87	Santa Cruz	2	131	137	181	268	151	170	1,038
6	California	95	Solano	2	157	163	216	321	181	203	1,241
6	California	97	Sonoma	2	179	186	247	366	206	231	1,415
6	California	105	Trinity	2	126	131	174	257	145	162	995
6	California	113	Yolo	2	103	107	142	211	119	133	815
6	6 NORTHERN CALIFORNIA TOTAL				3,755 6,208	3,914	5,184	7,685	4,335	4,859	29,732
	SOUTHWEST REGION TOTAL					7,044	9,988	12,485	7,690	7,105	50,520

Table 2. Approximate Telephone Household Interview Quotas By State, County and Wave

							WA	VE			ANNUAL
	STATE		COUNTY SUBREG		1	2	3	4	5	6	TOTAL
41	Oregon	3	Benton	3	46	36	117	199	154	37	589
41	Oregon	5	Clackamas	3	95	74	238	406	313	75	1,201
41	Oregon	7	Clatsop	3	32	25	80	137	106	25	405
41	Oregon	9	Columbia	3	34	27	85	146	112	27	431
41	Oregon	11	Coos	3	43	34	108	184	142	34	545
41	Oregon	15	Curry	3	27	21	67	115	89	22	341
41	Oregon	19	Douglas	3	53	42	133	228	176	42	674
41	Oregon	29	Jackson	3	71	56	179	305	236	57	904
41	Oregon	33	Josephine	3	48	37	119	204	157	38	603
41	Oregon	39	Lane	3	95	75	240	409	316	76	1,211
41	Oregon	41	Lincoln	3	37	29	92	158	122	29	467
41	Oregon	43	Linn	3	54	42	135	230	178	43	682
41	Oregon	47	Marion	3	87	68	218	372	287	69	1,101
41	Oregon	51	Multnomah	3	141	111	353	603	464	112	1,784
41	Oregon	53	Polk	3	40	31	100	171	132	32	506
41	Oregon	57	Tillamook	3	26	21	67	112	87	21	334
41	Oregon	67	Washington	3	106	84	267	456	351	85	1,349
41	Oregon	71	Yamhill	3	45	36	114	195	150	36	576
41	OREGON STATE T	OTAL	i		1,080	849	2,712	4,630	3,572	860	13,703
53	Washington	-	Clallam	3	33	34	117	200	108	61	553
53	Washington	27	Grays Harbor	3	33	34	118	201	109	62	557
53	Washington	29	Island	3	33	34	117	201	109	62	556
53	Washington	31	Jefferson	3	22	23	77	132	71	40	365
53	Washington	33	King	3	168	173	591	1009	546	310	2,797
53	Washington	35	Kitsap	3	59	61	209	358	193	110	990
53	Washington	45	Mason	3	28	28	97	167	90	51	461
53	Washington	49	Pacific	3	19	20	67	115	62	35	318
53	Washington	53	Pierce	3	102	105	360	616	333	189	1,705
53	Washington	55	San Juan	3	16	16	55	91	50	28	256
53	Washington	57	Skagit	3	40	41	140	240	130	73	664
53	Washington	61	Snohomish	3	94	97	331	566	306	174	1,568
53	Washington	67	Thurston	3	57	58	199	341	184	105	944
53	Washington	73	Whatcom	3	50	51	176	301	163	92	833
53	53 WASHINGTON STATE TOTAL				754	775	2,654	4,538	2,454	1,392	12,567
	NORTHWEST REGION TOTAL					1,624	5,366	9,168	6,026	2,252	26,270
	PACIFIC COAST TO		8,042	8,668	15,354	21,653	13,716	9,357	76,790		

Solicitation No. 52-DGNF-1-90028

89.2

Table 2. Approximate Telephone Household Interview Quotas By State, County and Wave

							WA	/E			ANNUAL
	STATE		COUNTY SUBREG		1	2	3	4	5	6	TOTAL
Ĝ	Connecticut	1	Fairfield	4	0	66	302	335	231	84	1,018
9	Connecticut	3	Hartford	4	0	66	305	339	234	85	1,029
9	Connecticut	5	Litchfield	4	0	31	143	159	110	40	483
9	Connecticut	7	Middlesex	4	0	28	130	145	100	36	439
9	Connecticut	9	New Haven	4	0	65	298	331	228	83	1,005
9	Connecticut	11	New London	4	0	35	163	181	125	45	549
9	Connecticut	13	Tolland	4	0	25	117	130	90	32	394
9	Connecticut	15	Windham	4	0	24	106	118	82	29	359
9	CONNECTICUT ST	ATE T	OTAL		1	342	1,567	1,742	1,205	440	5,365
23	Maine	1	Androscoggin	4	0	0	175	255	119	0	549
23	Maine	5	Cumberland	4	0	0	281	410	191	0	882
23	Maine	9	Hancock	4	0	0	125	182	85	0	392
23	Maine	11	Kennebec	4	0	0	186	270	126	0	582
23	Maine	13	Knox	4	0	0	109	159	75	0	343
23	Maine	15	Lincoln	4	0	0	100	145	68	0	313
23	Maine	19	Penobscot	4	0	0	205	299	140	0	644
23	Maine	23	Sagadahoc	4	0	0	102	149	70	0	321
23	Maine	27	Waldo	4	0	0	104	152	71	0	327
23	Maine	29	Washington	4	0	0	103	150	70	0	323
	Maine		York	4	0	0	228	333	156	0	717
_	MAINE STATE TOT				0	0	1,718	2,504	1,171	0	5,393
25	Massachusetts		Barnstable	4	0	76	286	458	225	42	1,087
	Massachusetts	-	Bristol	4	0	113	423	677	332	62	1,607
	Massachusetts		Dukes	4	0	20	74	118	58	11	281
25	Massachusetts	-	Essex	4	0	132	495	792	389	73	1,881
	Massachusetts		Middlesex	4	0	188	703	1125	552	103	2,671
25	Massachusetts	19	Nantucket	4	0	15	55	87	43	8	208
	Massachusetts		Norfolk	4	0	126	473	756	371	69	1,795
	Massachusetts		Plymouth	4	0	104	388	620	304	57	1,473
	Massachusetts		Suffolk	4	0	128	481	769	377	70	1,825
	MASSACHUSETTS				0	902	3,378	5,402	2,651	495	12,828
	New Hampshire		Hillsborough	4	0	0	399	501	241	0	1,141
	New Hampshire	-	Merrimack	4	0	0	238	298	144	0	680
	New Hampshire	15	Rockingham	4	0	0	336	421	203	0	960
33									100		
33 33	New Hampshire NEW HAMPSHIRE		Strafford	4	0 0	0	217 1.190	273 1,493	132 720	0 0	622 3,403

Table 2. Approximate Telephone Household Interview Quotas By State, County and Wave

							WA	VE			ANNUAL
	STATE		COUNTY SUBREG		1	2	3	4	5	6	TOTAL
44	Rhode Island	1	Bristol	4	0	35	105	188	122	56	506
44	Rhode Island	3	Kent	4	0	66	196	352	227	102	943
44	Rhode Island	5	Newport	4	0	47	139	250	162	73	671
44	Rhode Island	7	Providence	4	0	121	364	654	423	190	1,752
	Rhode Island		Washington	4	0	55	163	293	190	85	786
44	RHODE ISLAND ST				0	324	967	1,737	1,124	506	4,658
	NORTH ATLANTIC				1	1,568	8,820	12,878	6,871	1,441	31,647
	Delaware		Kent	5	0	80	239	319	206	99	943
10	Delaware	3	New Castle	5	0	161	486	649	419	201	1,916
_	Delaware			5	0	89	266	355	230	110	1,050
	DELAWARE STATE				0	330	991	1,323	855	410	3,909
24	Maryland	3	Anne Arundel	5	0	75	254	327	243	93	992
24	Maryland	5	Baltimore	5	0	97	329	425	315	120	1,286
	Maryland	9	Calvert	5	0	28	96	124	92	35	375
	Maryland	11	Caroline	5	0	19	64	83	62	23	251
24	Maryland	15	Cecil	5	0	31	105	136	101	39	412
24	Maryland	17	Charles	5	0	36	122	158	117	45	478
24	Maryland	19	Dorchester	5	0	20	67	87	64	25	263
24	Maryland	25	Harford	5	0	50	170	220	163	62	665
	Maryland	27	Howard	5	0	54	183	236	175	67	715
24	Maryland	29	Kent	5	0	16	54	68	50	20	208
24	Maryland	31	Montegomery	5	0	102	347	448	332	127	1,356
24	Maryland	33	Prince Georges	5	0	95	323	417	309	118	1,262
24	Maryland	35	Queen Annes	5	0	22	75	97	72	27	293
24	Maryland	37	St. Marys	5	0	31	106	137	102	39	415
24	Maryland	39	Somerset	5	0	16	55	70	52	19	212
24	Maryland	41	Talbot	5	0	21	72	93	69	26	281
24	Maryland	45	Wicomico	5	0	32	107	138	102	39	418
24	Maryland	47	Worcester	5	0	24	81	104	77	30	316
24	24 Maryland 510 Baltimore City					89	301	389	288	110	1,177
24	MARYLAND STATE	TOT	AL		0	858	2,911	3,757	2,785	1,064	11,375

Table 2. Approximate Telephone Household Interview Quotas By State, County and Wave

							WA	VE			ANNUAL
	STATE		COUNTY SUBREG		1	2	3	4	5	6	TOTAL
34	New Jersey	1	Atlantic	5	0	50	203	312	198	75	838
34	New Jersey	3	Bergen	5	0	94	384	590	375	141	1,584
34	New Jersey	5	Burlington	5	0	64	258	395	251	95	1,063
34	New Jersey	7	Camden	5	0	71	287	439	279	106	1,182
34	New Jersey	9	Cape May	5	0	33	134	205	130	49	551
34	New Jersey	11	Cumberland	5	0	36	147	226	144	54	607
34	New Jersey	13	Essex	5	0	86	348	534	339	129	1,436
34	New Jersey	15	Gloucester	5	0	49	198	303	193	73	816
34	New Jersey	17	Hudson	5	0	76	307	471	299	114	1,267
34	New Jersey	21	Mercer	5	0	58	235	360	228	87	968
34	New Jersey	23	Middelsex	5	0	85	343	526	334	126	1,414
34	New Jersey	25	Monmouth	5	0	78	316	484	308	117	1,303
34	New Jersey	27	Morris	5	0	68	274	421	267	101	1,131
34	New Jersey	29	Ocean	5	0	74	298	456	290	110	1,228
34	New Jersey	31	Passaic	5	0	68	275	421	268	102	1,134
34	New Jersey	33	Salem	5	0	26	104	160	102	39	431
34	New Jersey	35	Somerset	5	0	55	221	339	215	82	912
34	New Jersey	39	Union	5	0	71	289	443	281	107	1,191
	NEW JERSEY STA				0	1,142	4,621	7,085	4,501	1,707	19,056
	New York	-	Bronx	5	0	84	357	601	320	121	1,483
36	New York	47	Kings	5	0	117	498	836	445	167	2,063
36	New York	59	Nassau	5	0	86	367	617	328	124	1,522
36	New York		New York	5	0	113	479	804	428	162	1,986
	New York	-	Putnam	5	0	23	98	166	88	33	408
	New York	-	Queens	5	0	112	475	797	424	160	1,968
36	New York	85	Richmond	5	0	49	209	350	187	70	865
	New York	-	Rockland	5	0	39	168	282	150	57	696
	New York	103	Suffolk	5	0	87	369	620	330	125	1,531
	New York		Westchester	5	0	75	319	536	285	108	1,323
36	36 NEW YORK STATE TOTAL					785	3,339	5,609	2,985	1,127	13,845

Table 2. Approximate Telephone Household Interview Quotas By State, County and Wave

							WA	VE			ANNUAL
	STATE		COUNTY SUBREG	İ	1	2	3	4	5	6	TOTAL
51	Virginia	1	Accomack	5	0	19	66	78	43	30	236
	Virginia	33	Caroline	5	0	15	50	59	33	23	180
51	Virginia	36	Charles City	5	0	8	28	34	18	13	101
51	Virginia	41	Chesterfield	5	0	50	172	204	112	78	616
51	Virginia	53	Dinwiddie	5	0	15	53	63	35	24	190
51	Virginia	57	Essex	5	0	10	34	41	22	15	122
51	Virginia	73	Gloucester	5	0	19	65	78	43	30	235
51	Virginia	85	Hanover	5	0	29	100	119	65	45	358
51	Virginia	87	Henrico	5	0	54	186	221	120	84	665
51	Virginia	93	Isle of Wright	5	0	17	60	71	39	27	214
51	Virginia	95	James City	5	0	22	76	90	49	34	271
51	Virginia	97	King and Queen	5	0	8	28	34	18	13	101
51	Virginia	99	King George	5	0	13	45	53	29	20	160
51	Virginia	101	King William	5	0	12	39	47	26	18	142
	Virginia	103	Lancaster	5	0	12	40	47	26	18	143
	Virginia	115	Mathews	5	0	11	36	43	24	17	131
51	Virginia	119	Middlesex	5	0	11	37	44	24	17	133
51	Virginia	127	New Kent	5	0	12	39	47	26	18	142
	Virginia	131	Northampton	5	0	12	41	49	27	19	148
51	Virginia	133	Northumberland	5	0	12	41	49	27	19	148
	Virginia	149	Prince George	5	0	16	56	66	37	25	200
51	Virginia	153	Prince William	5	0	49	168	199	110	76	602
51	Virginia	159	Richmond	5	0	9	32	38	21	14	114
51	Virginia	175	Southampton	5	0	13	46	55	30	21	165
	Virginia	177	Spotsylvania	5	0	28	95	113	62	43	341
51	Virginia	179	Stafford	5	0	29	100	119	66	46	360
	Virginia	181	Surry	5	0	8	28	34	18	13	101
51	Virginia	183	Sussex	5	0	11	36	43	24	17	131
	Virginia	193	Westmoreland	5	0	13	46	54	30	21	164
51	Virginia	199	York	5	0	24	83	99	54	38	298
	Virginia	550	Chesapeake City	5	0	44	151	179	99	69	542
51	Virginia	570	Colonial Heights City	5	0	14	47	56	31	21	169
	Virginia		Fredricksburg City	5	0	15	52	62	34	24	187
51	Virginia	650	Hampton City	5	0	39	132	158	87	60	476
51	Virginia	670	Hopewell City	5	0	16	54	64	35	25	194
51	Virginia	700	Newport News City	5	0	44	150	178	98	68	538
	Virginia		Norfolk City	5	0	47	161	192	106	73	579
	Virginia	730	Petersburg City	5	0	20	67	80	44	31	242
	Virginia		Poquoson City	5	0	10	36	43	24	16	129
	Virginia		Portsmouth City	5	0	32	110	131	72	50	395
	Virginia	760	Richmond City	5	0	48	165	196	108	75	592
51	Virginia		Suffolk City	5	0	25	87	103	57	39	311

1	51 Virginia	810 Vi	irginia Beach City	5	0	64	221	263	144	101	793
	51 Virginia	830 W	/illiamsburg City	5	0	10	34	41	22	15	122
	51 VIRGINIA STATE	TOTAL			0	989	3,393	4,037	2,219	1,543	12,181
	MID-ATLANTIC SUBREGION TOTAL			0	4,104	15,255	21,811	13,345	5,851	60,366	
	NORTHEAST REG	SION TOT	AL		1	5,672	24,075	34,689	20,216	7,292	92,013

Table 2. Approximate Telephone Household Interview Quotas By State, County and Wave

							WAY	/E			ANNUAL
	STATE		COUNTY SUBRE	G	1	2	3	4	5	6	TOTAL
13	Georgia	1	Appling	6	0	0	30	29	26	0	85
	Georgia		Brantley	6	0	28	26	25	22	24	125
13	Georgia	29	Bryan	6	0	36	33	32	29	31	161
13	Georgia	31	Bulloch	6	0	0	51	49	44		144
	Georgia	39	Camden	6	0	51	47	45	40	44	227
13	Georgia	49	Charlton	6	0	23	21	23	18	20	105
13	Georgia	51	Chatham	6	0	120	109	107	95	103	534
13	Georgia	103	Effingham	6	0	47	43	42	37	40	209
13	Georgia	109	Evans	6	0	0	23	23	20		66
13	Georgia	127	Glynn	6	0	66	61	59	52	57	295
13	Georgia	179	Liberty	6	0	54	50	48	43	46	241
13	Georgia	183	Long	6	0	23	21	20	18	21	103
13	Georgia	191	Mcintosh	6	0	25	23	22	20	21	111
13	Georgia	229	Pierce	6	0	0	29	28	25	0	82
	Georgia	251	Screven	6	0	0	28	27	24	0	79
13	Georgia	267	Tattnall	6	0	0	30	29	25	0	84
13	Georgia	299	Ware	6	0	0	44	42	38	0	124
13	Georgia	305	Wayne	6	0	40	37	36	32	34	179
13	GEORGIA STATE 1	ΙΑΤΟ	_		0	513	706	686	608	441	2,954
37	North Carolina	13	Beaufort	6	0	44	76	95	66	56	337
37	North Carolina	15	Bertie	6	0	29	49	62	43	36	219
37	North Carolina	17	Bladen	6	0	36	62	78	54	46	276
37	North Carolina	19	Brunswick	6	0	56	95	120	84	70	425
37	North Carolina	29	Camden	6	0	16	28	35	25	21	125
37	North Carolina	31	Carteret	6	0	52	90	113	79	66	400
37	North Carolina	41	Chowan	6	0	25	42	53	37	31	188
37	North Carolina	47	Columbus	6	0	47	81	101	71	60	360
37	North Carolina	49	Craven	6	0	60	102	129	90	75	456
37	North Carolina	51	Cumberland	6	0	0	177	223	156	0	556
37	North Carolina	53	Currituck	6	0	28	47	59	41	35	210
37	North Carolina	55	Dare	6	0	36	62	78	55	46	277
37	North Carolina	61	Duplin	6	0	43	73	92	64	54	326
37	North Carolina	63	Durham	6	0	0	164	206	144	0	514
37	North Carolina	65	Edgecombe	6	0	47	80	101	71	59	358
	N (1 O P	60	Franklin	6	0	0	75	94	66	0	235
37	North Carolina	US		_					24	26	156
-	North Carolina North Carolina	73	Gates	6	0	20	35	44	31	20	100
37			-	_	0	20 0	35 70	44 88	62	0	220
37 37	North Carolina North Carolina	73 77 79	Gates Granville Greene	6 6 6	0	-	70 46		62 41	-	
37 37 37	North Carolina North Carolina North Carolina	73 77 79	Gates Granville	6	0	0	70	88 58 104	62 41 73	0	220
37 37 37 37	North Carolina North Carolina North Carolina	73 77 79 83	Gates Granville Greene	6 6 6	0	0 27	70 46	88 58	62 41	0 34	220 206
37 37 37 37 37 37	North Carolina North Carolina North Carolina North Carolina North Carolina	73 77 79 83 85 91	Gates Granville Greene Halifax	6 6 6	0 0	0 27 48	70 46 83	88 58 104	62 41 73	0 34 61	220 206 369

37	North Carolina	95	Hyde	6	0	15	26	33	23	19	116
37	North Carolina	101	Johnston	6	0	0	118	148	104	0	370
37	North Carolina	103	Jones	6	0	19	33	42	29	25	148
37	North Carolina	107	Lenoir	6	0	51	87	109	76	64	387
37	North Carolina	117	Martin	6	0	33	57	71	50	42	253
Soli	citation No. 52-D	GNF-	1-90028								89.7

Table 2. Approximate Telephone Household Interview Quotas By State, County and Wave

	STATE COUNTY SUBREG						WA	VΕ			ANNUAL
	STATE		COUNTY SUB	REG	1	2	3	4	5	6	TOTAL
37	North Carolina	125	Moore	(6 0	0	98	123	86	0	307
37	North Carolina	127	Nash		0	0	107	134	94	0	335
37	North Carolina	129	New Hanover		0	83	142	178	125	104	632
37	North Carolina	131	Northampton		0	30	51	64	45	38	228
37	North Carolina	133	Onslow		0	66	113	142	99	83	503
37	North Carolina	137	Pamlico		0	24	41	51	36	30	182
37	North Carolina	139	Pasquotank		0	38	64	81	57	47	287
37	North Carolina	141	Pender		0	42	71	89	62	52	316
37	North Carolina	143	Perquimans		0	22	37	47	33	28	167
37	North Carolina	147	Pitt		0	72	126	158	111	93	560
37	North Carolina	153	Richmond		0	0	76	95	66	0	237
37	North Carolina	155	Robeson		0	67	114	144	100	83	508
37	North Carolina	163	Sampson		0	47	80	101	70	59	357
37	North Carolina	165	Scotland		0	0	65	81	57	0	203
37	North Carolina	177	Tyrrell		0	13	22	28	19	16	98
37	North Carolina	181	Vance		0	0	71	90	63	0	224
37	North Carolina	183	Wake		0	0	274	344	240	0	858
37	North Carolina	185	Warren		0	0	47	59	41	0	147
37	North Carolina	187	Washington		0	24	41	51	36	30	182
37	North Carolina		Wayne		0	67	114	143	100	84	508
	North Carolina		Wilson	(0	54	93	117	82	68	414
	NORTH CAROLINA				1	1,414	3,919	4,926	3,448	1,786	15,563
	South Carolina		Allendale	l l	0	0	35	37	26	0	98
	South Carolina	9	Bamberg		0	0	44	47	30	0	121
		-	Beaufort	l l	0	67	118	126	82	75	468
45			Berkeley	l l	0	71	125	134	87	80	497
	South Carolina	19		l l	0	115	204	218	142	129	808
	South Carolina	27	Clarendon		0	0	59	63	41	0	163
	South Carolina	29			0	39	68	73	47	43	270
	South Carolina	33			0	0	60	64	41	0	165
	South Carolina		Dorchester		0	58	102	109	71	65	405
	South Carolina		Florence		0	71	125	133	87	79	495
	South Carolina	43	5	l l	0	47	82	88	57	52	326
		49			0	28	49	52	34	31	194
	South Carolina		Horry		0	88	156	167	108	99	618
	South Carolina		Jasper		0	25	45	48	32	29	179
45	South Carolina	67	Marion	(6 0	37	65	70	45	41	258

45	South Carolina	75	Orangeburg	6	0	0	103	110	71	0	284
45	South Carolina	89	Williamsburg	6	0	37	65	70	45	41	258
45	45 SOUTH CAROLINA STATE TOTAL					683	1,505	1,609	1,046	764	5,607
	SOUTH ATLANTIC	SUBF	REGION TOTAL		1	2,610	6,130	7,221	5,102	2,991	24,124
1	Alabama	3	Baldwin	7	199	252	278	276	205	197	1,407
1	Alabama	25	Clarke	7	0	0	123	122	90	0	335
1	Alabama	53	Escambia	7	0	0	141	140	104	0	385
1	Alabama	97	Mobile	7	337	426	470	466	345	333	2,377
1	Alabama	129	Washington	7	0	0	96	95	71	0	262
1	1 ALABAMA STATE TOTAL					678	1,108	1,099	815	530	4,766

89.8

Table 2. Approximate Telephone Household Interview Quotas By State, County and Wave

							WA	VΕ			ANNUAL
	STATE		COUNTY SUBREG		1	2	3	4	5	6	TOTAL
12	East Florida	3	Baker	6	59	62	78	78	59	53	389
12	East Florida	7	Bradford	6	66	70	88	87	67	60	438
12	East Florida	9	Brevard	6	314	334	418	417	319	284	2,086
12	East Florida	11	Broward	6	575	610	764	762	584	520	3,815
12	East Florida	19	Clay	6	157	166	208	207	159	142	1,039
12	East Florida	25	Dade	6	627	665	833	829	636	567	4,157
12	East Florida		Duval	6	388	412	516	514	394	351	2,575
12	East Florida	35	Flager	6	97	103	128	128	98	87	641
12	East Florida	61	Indian River	6	153	162	203	203	155	138	1,014
12	East Florida	69	Lake	6	208	220	276	275	211	188	1,378
12	East Florida	85	Martin	6	163	173	216	216	165	147	1,080
12	East Florida	89	Nassau	6	103	109	137	136	104	93	682
12	East Florida	93	Okeechobee	6	77	82	103	103	79	70	514
12	East Florida	95	Orange	6	405	430	539	537	412	367	2,690
12	East Florida	97	Osceola	6	167	178	222	222	170	151	1,110
12	East Florida		Palm Beach	6	474	504	631	629	482	430	3,150
12	East Florida	107	Putnam	6	119	127	158	158	121	108	791
12	East Florida		St. Johns	6	151	160	201	200	153	137	1,002
12	East Florida		St. Lucie	6	192	203	255	254	194	173	1,271
12	East Florida		Seminole	6	259	275	344	343	263	234	1,718
12	East Florida	_	Union	6	42	46	56	55	42	38	279
	East Florida		Volusia	6	300	319	399	398	305	272	1,993
	EAST FLORIDA TO				5,096	5,410	6,773	6,751	5,172	4,610	33,812
	West Florida		Alachua	7	200	264	310	295	193	184	1,446
	West Florida		Bay	7	165	217	256	243	159	152	1,192
	West Florida	_	Calhoun	7	48	63	75	71	46	44	347
	West Florida		Charlotte	7	167	220	259	247	161	154	1,208
	West Florida	17		7	153	202	237	226	148	141	1,107
	West Florida		Collier	7	205	270	317	302	197	188	1,479
	West Florida	_	Columbia	7	100	132	155	148	97	92	724
	West Florida		De Soto	7	69	92	108	102	67	64	502
12	West Florida	29	Dixie	7	47	62	73	70	45	43	340

1 12	West Florida	33	Escambia	7	229	303	356	338	221	211	1.658
					-						,
	West Florida	-	Franklin	/	46	59	70	66	43	42	326
12	West Florida	39	Gadsden	7	90	119	139	133	87	83	651
12	West Florida	41	Gilchrist	7	47	61	72	68	44	42	334
12	West Florida	43	Glades	7	40	53	62	59	39	37	290
12	West Florida	45	Gulf	7	49	65	76	72	47	45	354
12	West Florida	47	Hamilton	7	47	62	73	70	45	43	340
12	West Florida	49	Hardee	7	57	76	89	85	55	53	415
12	West Florida	51	Hendry	7	68	89	105	100	65	62	489
12	West Florida	53	Hernando	7	159	209	246	234	153	146	1,147
12	West Florida	55	Highlands	7	129	170	199	190	124	118	930
12	West Florida	57	Hillsborough	7	418	552	649	616	404	385	3,024
12	West Florida	59	Holmes	7	55	73	86	82	53	51	400
12	West Florida	63	Jackson	7	92	121	143	136	89	85	666
12	West Florida	65	Jefferson	7	47	62	73	70	45	43	340
0 1:	-!4-4! N- FO D		4 00000								

89.9

Table 2. Approximate Telephone Household Interview Quotas By State, County and Wave

							WA	VE			ANNUAL
	STATE		COUNTY SUBREG		1	2	3	4	5	6	TOTAL
12	West Florida	67	Lafayette	7	34	44	53	50	34	32	247
12	West Florida	71	Lee	7	284	375	441	419	274	262	2,055
12	West Florida	73	Leon	7	208	275	323	307	201	192	1,506
12	West Florida	75	Levy	7	77	102	120	114	75	71	559
12	West Florida	77	Liberty	7	34	45	53	51	35	33	251
12	West Florida	79	Madison	7	55	73	86	82	53	51	400
12	West Florida	81	Manatee	7	225	297	350	333	217	208	1,630
12	West Florida	83	Marion	7	216	285	335	318	208	199	1,561
12	West Florida	87	Monroe	7	132	174	204	195	127	121	953
12	West Florida	91	Okaloosa	7	177	234	275	261	171	163	1,281
12	West Florida	101	Pasco	7	258	340	400	380	248	237	1,863
12	West Florida	103	Pinellas	7	433	572	672	638	418	399	3,132
12	West Florida	105	Polk	7	293	387	455	432	283	270	2,120
12	West Florida	113	Santa Rosa	7	136	179	210	200	131	125	981
12	West Florida	115	Sarasota	7	261	344	404	385			1,885
12	West Florida	119	Sumter	7	94	124	146	139	91	87	681
12	West Florida	121	Suwannee	7	77	102	120	114	75	71	559
12	West Florida	123	Taylor	7	58	77	90	86	56	54	421
12	West Florida	129	Wakulla	7	60	79	92	88	57	55	431
12	West Florida	131	Walton	7	87	114	134	128	84	80	627
12	West Florida	133	Washington	7	62	82	97	92	60		450
12	WEST FLORIDA TO			-	5,989	7,902	9,291	8,839	5,781	5,521	43,392
	Louisiana		Acadia	7	0	0	67	74	54	0	195
	Louisiana	_	Allen	7	0	0	41	46	33		120
22	Louisiana	5	Ascension	7	64	70	72	81	59	72	418
22	Louisiana		Assumption	7	36	39	40	45	33		233
22	Louisiana	11	Beauregard	7	0	0	48	53	39	0	140

22 L	ouisiana	19 Calcasieu	7	106	115	119	134	97	119	690
22 L	ouisiana	23 Cameron	7	25	25	26	29	21	28	154
22 L	ouisiana	33 East Baton Rouge	7	0	0	177	198	144	0	519
22 L	ouisiana	37 East Feliciana	7	0	0	37	41	30	0	108
22 L	ouisiana	45 Iberia	7	65	71	73	82	60	73	424
22 L	ouisiana	47 Iberville	7	0	0	44	50	36	0	130
22 L	ouisiana	51 Jefferson	7	169	184	191	214	155	190	1,103
22 L	ouisiana	53 Jefferson Davis	7	43	47	49	54	40	48	281
22 L	ouisiana	55 Lafayette	7	108	118	122	136	99	121	704
22 L	ouisiana	57 Lafourche	7	71	78	80	90	65	80	464
22 L	ouisiana	63 Livingston	7	0	0	80	90	65	0	235
22 L	ouisiana	71 Orleans	7	172	187	194	217	158	193	1,121
22 L	ouisiana	75 Plaquemines	7	38	41	42	47	35	42	245
22 L	ouisiana	87 St. Bernard	7	63	69	71	80	58	71	412
22 L	ouisiana	89 St. Charles	7	53	58	60	67	49	60	347
22 L	ouisiana	91 St. Helena	7	0	0	26	30	22	0	78
22 L	ouisiana	93 St. James	7	33	36	38	42	31	37	217
22 L	_ouisiana 9	95 St. John the Baptist	7	48	53	54	61	44	54	266
22 L	ouisiana	97 St. Landry	7	0	0	78	88	64	0	230
22 L	ouisiana	99 St. Martin	7	51	56	58	65	47	58	284
22 L 22 L 22 L 22 L 22 L 22 L 22 L 22 L	Louisiana	47 Iberville 51 Jefferson Davis 53 Jefferson Davis 55 Lafayette 57 Lafourche 63 Livingston 71 Orleans 75 Plaquemines 85 St. Bernard 89 St. Charles 91 St. Helena 93 St. James 95 St. John the Baptist 97 St. Landry	7 7 7 7 7 7 7 7 7 7 7 7	0 169 43 108 71 0 172 38 63 53 0 33 48	0 184 47 118 78 0 187 41 69 58 0 36 53	44 191 49 122 80 80 194 42 71 60 26 38 54 78	50 214 54 136 90 90 217 47 80 67 30 42 61 88	36 155 40 99 65 65 158 35 58 49 22 31 44 64	0 190 48 121 80 0 193 42 71 60 0 37 54	1; 1,11 2; 7(4; 2; 1,1; 2; 4 3; 2; 2; 2; 2;

89.10

Table 2. Approximate Telephone Household Interview Quotas By State, County and Wave

						WA	VΕ			ANNUAL
STATE		COUNTY SUBREG		1	2	3	4	5	6	TOTAL
22 Louisiana	101	St. Mary	7	57	63	65	72	53	64	317
22 Louisiana	103	St. Tammany	7	105	114	118	133	97	118	580
22 Louisiana	105	Tangipahoa	7	75	81	84	94	69	84	412
22 Louisiana	109	Terrebonne	7	76	83	86	96	70	86	421
22 Louisiana	113	Vermilion	7	56	61	63	70	51	62	307
22 Louisiana	117	Washington	7	52	57	59	66	48	58	288
22 Louisiana	121	West Baton Rouge	7	0	0	40	44	32	0	116
22 Louisiana	125	West Feliciana	7	0	0	25	26	19	0	70
22 LOUISIANA STATE	TOT	AL		1,567	1,708	2,430	2,719	1,982	1,764	11,718
28 Mississippi	35	Forrest	7	0	0	149	126	116	0	391
28 Mississippi	39	George	7	40	59	75	63	58	49	344
28 Mississippi	41	Greene	7	0	0	55	47	44	0	146
28 Mississippi	45	Hancock	7	60	87	112	94	87	72	512
28 Mississippi	47	Harrison	7	122	179	230	193	179	148	1,051
28 Mississippi	59	Jackson	7	103	151	193	162	150	125	884
28 Mississippi	109	Pearl River	7	63	92	117	99	91	76	538
28 Mississippi	111	Perry	7	0	0	57	48	44	0	149
28 Mississippi	131	Stone	7	33	49	62	52	48	40	251
28 MISSISSIPPI STATE TOTAL				421	617	1,050	884	817	510	4,266
GULF OF MEXICO SUBREGION TOTAL				13,609	16,315	20,652	20,292	14,567	12,935	97,954
72 Puerto Rico			11	2000	2000	2000	2000	2000	2000	12,000
78 U.S. Virgin Islands			11	900	900	900	900	900	900	5,400

11	11 US CARIBBEAN SUBREGION TOTAL					2,900	2,900	2,900	2,900	2,900	17,400
	SOUTHEAST REGION TOTAL					21,825	29,682	30,413	22,569	18,826	139,478
	ATLANTIC AND GULF COAST TOTAL			16,511	27,497	53,757	65,102	42,785	26,118	231,491	
8	Hawaii	1	Hawaii	15	600	600	600	600	600	600	3600
8	Hawaii	3	Honolulu	15	600	600	600	600	600	600	3600
8	Hawaii	7	Kauai	15	600	600	600	600	600	600	3600
8	Hawaii	9	All Other counties	15	400	400	400	400	400	400	2400
8	8 HAWAII TOTAL				2200	2200	2200	2200	2200	2200	13200
	WEST PACIFIC TOTAL				2200	2200	2200	2200	2200	2200	13200
	GRAND TOTAL				26,753	38,365	71,311	88,955	58,701	37,675	321,481

Table 3. 2001 Atlantic Coastal Cooperative Statistics Program Add-on to the Telephone Household Interviews By State and Wave.

STATE		WAVE									
	1	2	3	4	5	6	Total				
Connecticut	0	76	734	827	839	126	2,602				
Maine	0	0	397	627	249	0	1,273				
Massachusetts	0	378	1708	2796	1514	158	6,554				
New Hampshire	0	0	186	261	124	0	571				
Rhode Island	0	66	412	827	607	165	2,077				
Norht Atlantic Subregion	0	520	3437	5338	3333	449	13077				
Delaware	0	70	425	603	446	113	1,657				
Maryland	0	353	1458	1912	1519	465	5,707				
New Jersey	0	506	2376	3700	2632	810	10,024				
New York	0	315	1686	2908	1887	499	7,295				
Virginia	0	425	1717	2063	1133	722	6,060				
Mid-Atlantic Subregion	0	1669	7662	11186	7617	2609	30743				
Total	0	2,189	11,099	16,524	10,950	3,058	43,820				

Table 4. Estimated Numbers of Charter and Head Boats By State.

State	Charter Boat	Head Boat	Unknown	Total # of Vessels
Connecticut	196	39	29	264
Maine	58	5	0	63
Massachusettes	231	40	135	406
New Hampshire	19	10	0	29
Rhode Island	48	5	25	78
North Atlantic Subregion	552	99	189	840
Delaware	14	3	51	68
Maryland	52	27	83	162
New Jersey	155	75	28	258
New York	84	43	10	137
Virginia	31	14	189	234
Mid-Atlantic Subregion	336	162	361	859
Northeast Region	888	261	550	1699
Georgia	2	0	149	151
North Carolina	295	0	0	295
South Carolina	210	17	0	227
South Atlantic Subregion	507	17	149	673
U.S. Virgin Islands	23	0	0	23
Puerto Rico	18	0	0	18
U.S. Caribbean Subregion	41	0	0	41
Southeast Region	548	17	149	714
Total	1436	278	699	2413

Table 5. Charter and Head Boat Sampling Weeks by Wave, 2002-2004.

2002		2003		2004	
Dates V	/ave	Dates	Wave	Dates	Wave
December 31-January 6	1	December 30-January 5	1	December 29-January 4	1
January 7-13	1	January 6-12	1	January 5-11	1
January 14-20	1	January 13-19	1	January 12-18	1
January 21-27	1	January 20-26	1	January 19-25	1
January 28-February 3	1	January 27-February 2	1	January 26-February 1	1
February 4-10	1	February 3-9	1	February 2-8	1
February 11-17	1	February 10-16	1	February 9-15	1
February 18-24	1	February 17-23	1	February 16-22	1
Total Weeks	8	Total Weeks	8	Total Weeks	8
February 25-March 3	2	February 24-March 2	2	February 23-29	2
March 4-10	2	March 3-9	2	March 1-7	2
March 11-17	2	March 10-16	2	March 8-14	2
March 18-24	2	March 17-23	2	March 15-21	2
March 25-31	2	March 24-30	2	March 22-28	2
April 1-7	2	March 31-April 6	2	March 29-April 4	2
April 8-14	2	April 7-13	2	April 5-11	2
April 15-21	2	April 14-20	2	April 12-18	2
April 22-28	2	April 21-27	2	April 19-25	2
Total Weeks	9	Total Weeks	9	Total Weeks	9
April 29-May 5	3	April 28-May 4	3	April 26-May 2	3
May 6-12	3	May 5-11	3	May 3-9	3
May 13-19	3	May 12-18	3	May 10-16	3
May 20-26	3	May 19-25	3	May 17-23	3
May 27-June 2	3	May 26-June 1	3	May 24-30	3
June 3-9		June 2-8		May 31-June 6	3
June 10-16		June 9-15		June 7-13	3
June 17-23		June 16-22		June 14-20	3
June 24-June 30		June 23-June 29		June 21-June 27	3
Total Weeks	9	Total Weeks	9	Total Weeks	9
July 1-7	4	June 30-July 6	4	June 28-July 4	4
July 8-14	4	July 7-13	4	July 5-11	4
July 15-21	4	July 14-20	4	July 12-18	4
July 22-28	4	July 21-27	4	July 19-25	4
July 29-August 4		July 28-August 3		July 26-August 1	4
August 5-11	4	August 4-10	4	August 2-8	4
August 12-18	4	August 11-17	4	August 9-15	4
August 19-25	4	August 18-24	4	August 16-22	4
August 26-September 1		August 25-31		August 23-29	4
Total Weeks	9	Total Weeks	9	Total Weeks	9

Table 5. Charter and Head Boat Sampling Weeks by Wave, 2002-2004.

2002		2003		2004		
Dates	Wave	Dates	Wave	Dates	Wave	
September 2-8	5	September 1-7	5	August 30-September 5	5	
Septemeber 9-15	5	September 8-14	5	September 6-12	5	
September 16-22	5	September 15-21	5	September 13-19	5	
September 23-29	5	September 22-28	5	September 20-26	5	
September 30-October 6	5	September 29-October 5	5	September 27-October 3	5	
October 7-13	5	October 6-12	5	October 4-10	5	
October 14-20	5	October 13-19	5	October 11-17	5	
October 21-27	5	October 20-26	5	October 18-24	5	
October 28-November 3	5	October 27-November 2	5	October 25-31	5	
Total Weeks	9	Total Weeks	9	Total Weeks	9	
November 4-10	6	November 3-9	6	November 1-7	6	
November 11-17	6	November 10-16	6	November 8-14	6	
November 18-24	6	November 17-23	6	November 15-21	6	
November 25-December 1	6	November 24-30	6	November 22-28	6	
December 2-8	6	December 1-7	6	November 29-December	6	
December 9-15	6	December 8-14	6	December 6-12	6	
December 16-22	6	December 15-21	6	December 13-19	6	
December 23-29	6	December 22-28	6	December 20-26	6	
Total Weeks	8	Total Weeks	8	Total Weeks	8	

Table 6. Approximate Charter and Head Boat Sample Sizes by State and Wave.

Charter Boats

STATE							
	1	2	3	4	5	6	Total
Connecticut	0	198	198	198	198	176	968
Maine	0	54	54	54	54	0	216
Massachusetts	0	333	333	333	333	296	1,628
New Hampshire	0	27	27	27	27	0	108
Rhode Island	0	63	63	63	63	56	308
North Atlantic Subregion	0	675	675	675	675	528	3,228
Delaware	0	54	54	54	54	48	264
Maryland	0	126	126	126	126	112	616
New Jersey	0	162	162	162	162	144	792
New York	0	81	81	81	81	72	396
Virginia	0	198	198	198	198	176	968
Mid-Atlantic Subregion	0	621	621	621	621	552	3,036
Northeast Region	0	1,296	1,296	1,296	1,296	1,080	6,264
Georgia	0	135	135	135	135	120	660
North Carolina	0	270	270	270	270	240	1,320
South Carolina	0	189	189	189	189	168	924
South Atlantic Subregion	0	594	594	594	594	528	2,904
U.S. Virgin Islands	24	27	27	27	27	24	156
Puerto Rico	24	27	27	27	27	24	156
U.S. Caribbean Subregion	48	54	54	54	54	48	312
Southeast Region	48	648	648	648	648	576	3,216
Total	48	1,944	1,944	1,944	1,944	1,656	9,480

This sample size assumed that the unknown boats (Table C.4) are all charter boats.

Solicitation No. 52-DGNF-1-90028

93.1

Table 6. Approximate Charter and Head Boat Sample Sizes by State and Wave.

Head Boats

STATE	WAVE						
	1	2	3	4	5	6	Total
Connecticut	0	36	36	36	36	32	176
Maine	0	27	27	27	27	0	108
Massachusetts	0	36	36	36	36	32	176
New Hampshire	0	27	27	27	27	0	108
Rhode Island	0	27	27	27	27	24	132
North Atlantic Subregion	0	153	153	153	153	88	700
Delaware	0	27	27	27	27	24	132
Maryland	0	27	27	27	27	24	132
New Jersey	0	72	72	72	72	64	352
New York	0	36	36	36	36	32	176
Virginia	0	27	27	27	27	24	132
Mid-Atlantic Subregion	0	189	189	189	189	168	924
Northeast Region	0	342	342	342	342	256	1,624
Georgia	0	0	0	0	0	0	0
North Carolina	0	0	0	0	0	0	0
South Carolina	0	27	27	27	27	24	132
South Atlantic Subregion	0	27	27	27	27	24	132
U.S. Virgin Islands	0	0	0	0	0	0	0
Puerto Rico	0	0	0	0	0	0	0
U.S. Caribbean Subregion	0	0	0	0	0	0	0
Southeast Region	0	27	27	27	27	24	132
Total	0	369	369	369	369	280	1,756

Table 7. Approximate Charter and Head Boat Sample Sizes by State for the Annual Economic Add-on.

State	Total # of Vessels	Annual Survey Sample*
Connecticut	264	60
Maine	63	14
Massachusettes	406	93
New Hampshire	25	6
Rhode Island	78	18
North Atlantic Subregion	836	191
Delaware	68	16
Maryland	162	37
New Jersey	258	59
New York	137	31
Virginia	234	53
Mid-Atlantic Subregion	859	196
Georgia	151	34
North Carolina	295	67
South Carolina	227	52
South Atlantic Subregion	673	153
U.S. Virgin Islands	23	5
Puerto Rico	18	4
U.S. Caribbean Subregion	41	9
Total	2409	549

^{*} This is an approximate sample level. True levels can not be determined until vessel sizes and numbers of passengers per vessel are determined during the completion of the sampling frame and the first year's conduct of the CHBTS.

Table 8. Allowable Trip Dates for the RDD Telephone Survey, by year and wave.

		Number of	First	Last
Year	Wave	Days	Date	Date
2002	1	59	December 25, 2001	March 6, 2002
	2	61	February 22, 2002	May 6, 2002
	3	61	April 24, 2002	July 6, 2002
	4	62	June 24, 2002	September 6, 2002
	5	61	August 25, 2002	November 6, 2002
	6	61	October 26, 2002	January 7, 2003
2003	1	59	December 25, 2002	March 6, 2003
	2	61	February 22, 2003	May 6, 2003
	3	61	April 24, 2003	July 6, 2003
	4	62	June 24, 2003	September 6, 2003
	5	61	August 25, 2003	November 6, 2003
	6	61	October 26, 2003	January 7, 2004
2004	1	60	December 25, 2002	March 6, 2003
	2	61	February 23, 2003	May 6, 2003
	3	61	April 24, 2003	July 6, 2003
	4	62	June 24, 2003	September 6, 2003
	5	61	August 25, 2003	November 6, 2003
	6	61	October 26, 2003	January 7, 2004